

**PHENOLOGY AND DISTRIBUTION OF THE
COMMON CRANES (*Grus grus*) IN SPAIN
2022/2023**



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Image nº 1: Cranes leaving the roost on the castle of the Culebra, Alange (BA) Photo: José Leal

THANKS

Once again I have to express my most sincere thanks to everyone who participates by sharing information of their sightings and censuses during both migration periods; thanks to these we can produce weekly maps and compile the information that we publish weekly on our web site.

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To the S.A.R.G.A. team for the weekly censuses during migrations and wintering, at José Antonio Pinzolas and the government of Aragón by the crane mortality data.

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INTRODUCTION

The common crane is a bird belonging to the *Gruidae* family within the order *Gruiformes*. It breeds across the northern Palearctic (Jonhsgard, 1983), from the Scandinavian Peninsula to Siberia and to the south from central Europe (Germany, Czech Republic and Ukraine) to Mongolia and northern Manchuria in the east.

The crane is a polytypical species, with four subspecies recognised: *Grus grus grus* Linnaeus, 1758, *Grus grus lilfordi* Sharpe, 1894, *Grus grus archibaldi* Ilyashenko, 2008 and *Grus grus korolevi* Ilyashenko y Belyalov, 2013. Of these, the dominant subspecies are *Grus g. grus* and *Grus g. lilfordi*.

The subspecies *Grus g. lilfordi* is distributed throughout Asia and it should be noted that the majority of the population migrates within that continent, from the Middle East to Korea. The subspecies *Grus g. grus* is distributed throughout Europe. Those from the west migrate to Spain, those from the centre and east of Europe migrate to Africa and Arabian Peninsula.

The distribution limit of both subspecies is not clearly defined, but the eastern race is generally found east of the Obi River, while the western subspecies is found to the west of the Pechora and Volga Rivers.

Currently the Asian population is smaller than the European, with an estimated 120,000 individuals of the former (Prange, 2015), with populations that are in decline. These are primarily as a consequence of the end of the Soviet Union especially as a result of agricultural changes, which led to a significant decline in the Russian populations (Ilyashenko & Markin, 2010).



Map nº 1: Distribution, migration routes and wintering areas of common cranes. Source: I.C.F.

Conversely, the western population is constantly increasing, being estimated at over 580,000 cranes, probably due to protecting the species along with improving and restoring the breeding habitats.

In recent years we have been witnessing periods of drought in some breeding areas in Germany and Sweden, which are affecting local productivity. In the long run, this may imply a reduction in the population due to the lack of suitable breeding habitat and greater competition for the most favourable areas, which would also influence productivity, so we must be cautious and observe the evolution of the species in the coming years.

The majority of the western population of cranes is distributed across the north, centre and east of the European continent, with small numbers in the south of the continent, such as Turkey, and Transcaucasia in Asia (Prange 1997, 2006, 2007, 2015).

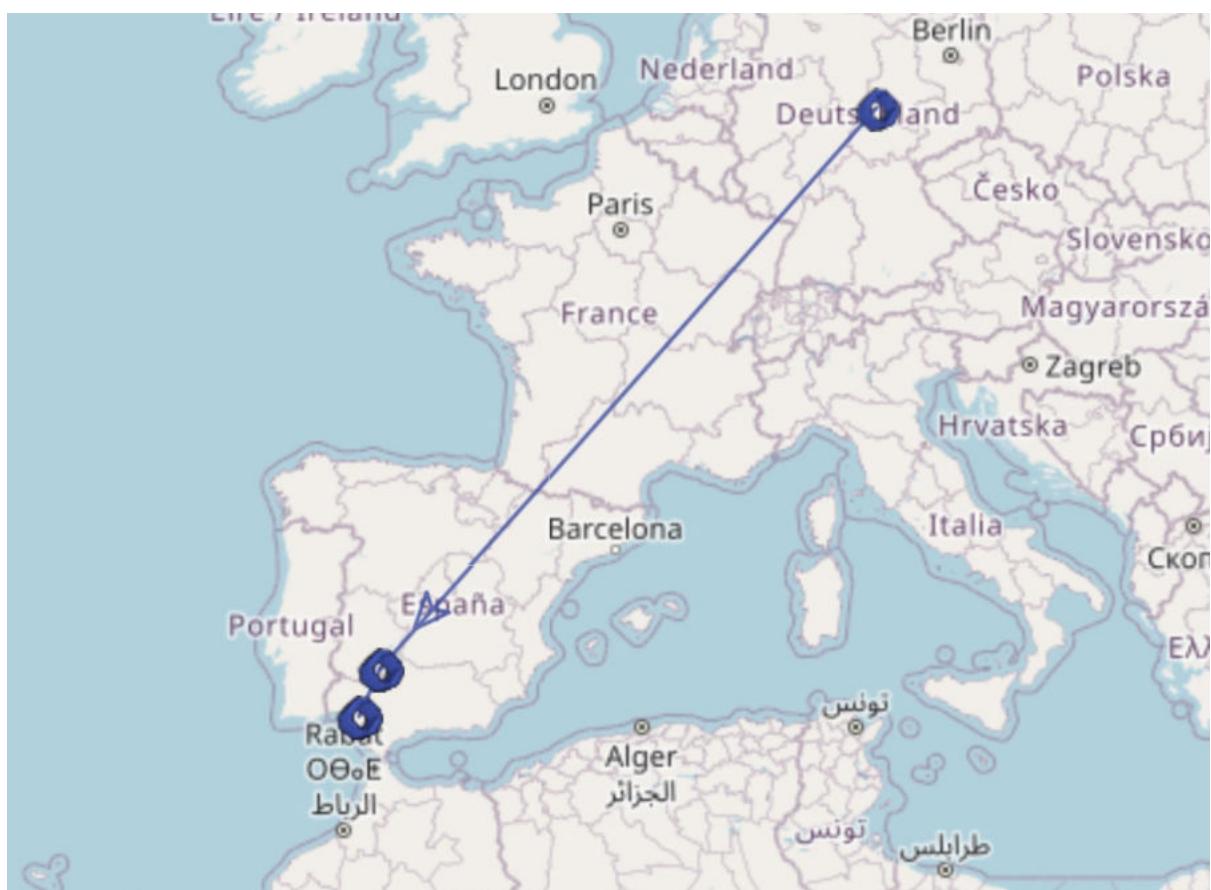
Currently the bulk of the west European breeding population is found in Finland, Scandinavian countries, the Baltic Republics, Poland and Germany. Other countries, such as the Czech Republic, Ukraine and Belarus, have smaller populations. There are recent cases of recolonisation, such as in the United Kingdom, where they began breeding in Norfolk in 1979 (Buxton, 1987), after 400 years, and where there is a reintroduction programme in Somerset. They have also naturally recolonized France since 1985 (where they became extinct in the 19th century) initially this happened in Normandy, but the majority of the breeding population is in Lorraine, with some 35/50 pairs (Salvi & Dulau 2018).

They have also bred in the Netherlands since 2001, where there are some 10 breeding pairs (Feenstra & Kuipers 2021), and recently, in 2021, they have bred in Belgium and Ireland (where they became extinct in the 17th Century).

In the Iberian Peninsula the species became extinct in the 20th Century; it used to breed in the Guadalquivir marshes, La Janda lagoon and the Sado estuary in the 19th Century (Bragança 1893). Successful breeding has only been proven in the marshes in 2017 and although in subsequent years up to two pairs nested (both originating from the La Cañada de los Pájaros Centre) these failed due to predation.

“Doñana” is the name of this crane, which migrated to Germany the following spring, where it was seen in October, returning the following season. It was seen to the south of Badajoz in February of the following year, probably returning to Germany, although there is no confirmation of its presence there.

It didn't return to “La Cañada de los Pájaros” until the autumn of 2021 (Dossío pers.comm.), spending the winter in the Doñana National Park marshes. It has been seen in this area since August 2022, so it is possible it didn't migrate and is paired up or trying to breed somewhere in the National Park.



Map nº 2: Doñana's movements between 2018 to 2022. Source: iCORA.



Image nº 1: "Doñana" at the Cañada de los Pájaros in autumn 2022, Photo: Cañada de los Pájaros

HABITAT

The common crane generally inhabits open areas in or near wetlands, where they feed and shelter. In countries where they breed, they nest in wetlands with dense vegetation and groves of trees, such as birches, placing nests on the ground. During this period they are not gregarious, with territorial pairs jealously defending their territories from other cranes. Gatherings are only seen of small groups of immature birds, or young of the previous year, which are roaming in search of feeding resources. Outside the breeding season, they visit recently-harvested cereal fields in search of grains, and also recently-sown fields that have already sprouted, forming groups whose size depends on the availability of food.

During the pre-migration and migration period, cranes are seen feeding in open fields, and they gather at particular wetlands (reservoirs, lagoons and other water-bodies) to sleep with cranes from neighbouring areas. The size of these concentrations depends on the availability of wetlands and feeding areas.

In the wintering areas, cranes historically occupied the dehesas of south-western Iberia, but following population growth and the planting of extensive areas with crops such as maize, this pattern has changed, and now it is common to see large flocks in stubble fields of this cereal, rice and other cereals. However, they still occupy the dehesas at the start of winter, when there is a readily-available supply of acorns, but maintain the same routines: sleeping in wetlands and feeding in the surrounding fields by day.

MIGRATION

The phenomenon of migration is one of the most striking and interesting aspects of cranes, which do not go unnoticed wherever they go, drawing attention by the flying formation and calling that accompanies their movements, by day or by night, not leaving out any European citizen, as their routes cross practically all the countries of the continent, as well as Asia Minor and northern Africa.

From the end of summer, cranes begin to collect in favoured areas (where thousands may gather) and begin to leave on migration in groups, heading for the wintering areas. This migration may begin early or late depending on the weather conditions, which also influence the duration of migration, as does the availability of food in resting areas along the migration route. They may leave early if there is no food, or they may extend their stay when resources are abundant.

The majority of the western population of cranes winter in south-western Europe, in dehesas, cultivated fields and wetlands in the Iberian Peninsula, France and Germany, while a fraction do so in northern Africa (Morocco, Algeria, Tunisia and Libya). Some of the European Russian, Finnish, Baltic and Belarusian cranes spend the winter in Sudan, Ethiopia and Eritrea, with a lesser number in Turkey, Israel, Iraq and parts of Iran.

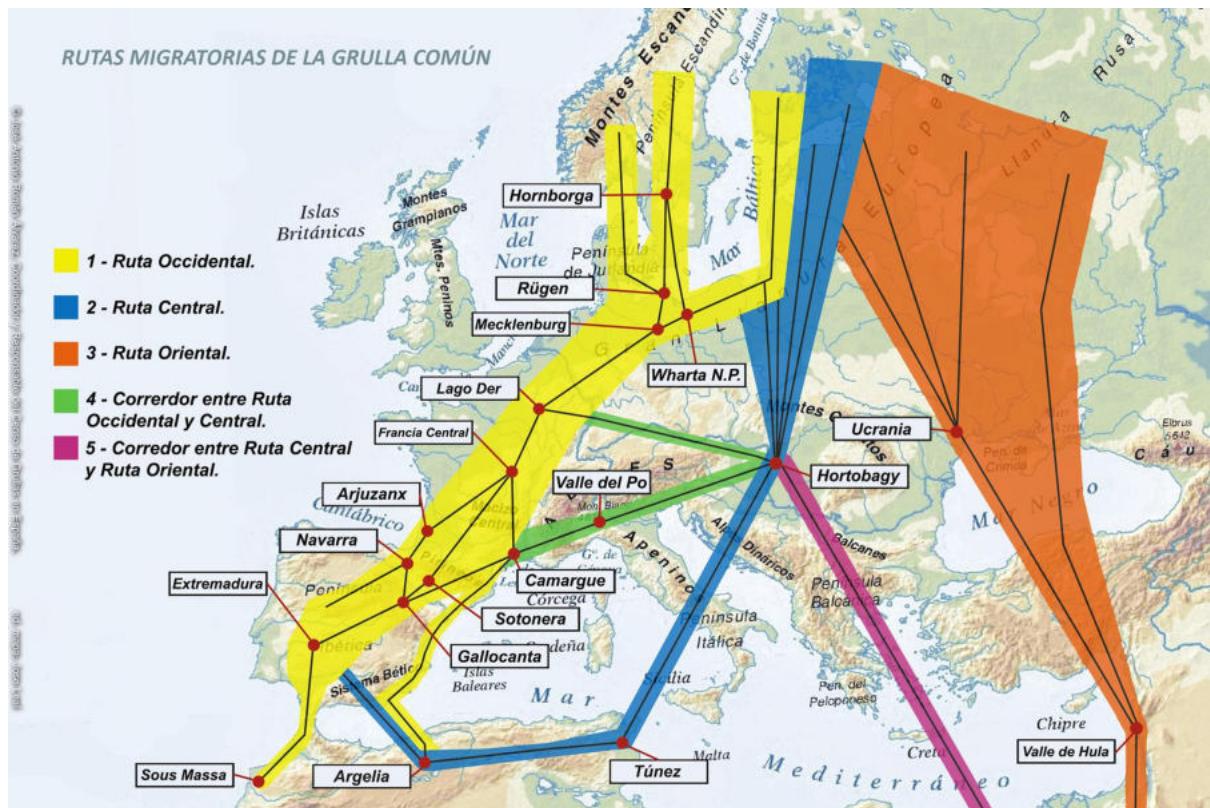
The migration routes of cranes pass through four regions:

Geographical Region	N.º Birds
Europe	500.000
Asia	150.000
Total	650.000

- The East European Route, the migration route of the cranes that winter in Africa, originating in the most easterly populations of the Baltic region, Finland, Ukraine and western Russia, crossing the Black Sea and flying to the Jordan Valley, to rest at Hula Lake in Israel and then continue to Eilat, in the Sinai, crossing the Red Sea and going on to the Nile Valley and following the river to their wintering quarters around

Lake Tana (Ethiopia). Some 70,000 cranes are estimated to use this route (Prange 2015)

- The Baltic-Hungarian Route (Central route), which birds from the Baltic region,, Finland and Belarus follow to Hortobagy National Park in Hungary (where they stay for weeks), then they continue to the Balkans, crossing Croatia, the Italian Peninsula and the Mediterranean to spend the winter in Tunisia and Algeria. Some of these birds head for the Bosphorus Straits in Turkey, looking for the route to Asia Minor, or even going through Greece and Cyprus to cross directly to northern Africa. This route could be used by the least 150.000 birds (Prange 2015) but given it is increasingly important, the figure could possibly be nearer 200.000 individuals.
- The West European Route, flown by Scandinavian birds which have previously gathered at Hornborga lake, fly to Rügen Island in Germany and then to this country, where they rest and feed and are joined in the Mecklenburg-Vorpommern area, by birds from Poland, Baltic countries and Finland. These flocks then head for Lac du Der, in Chantecoq in the north-east of France. From the middle of September, they may migrate in a staggered and continuous fashion or in big waves, depending on the weather conditions, being able to stay in this area for weeks. They continue their journey across France, south-westwards to Les Landes, Aquitaine, where they stop again before crossing the Pyrenees (although they may cross them directly if the weather conditions are favourable). They usually cross the mountain range through the valleys of Navarra and the most westerly ones of Aragón to head for Gallocanta Lagoon, an obligatory rest stop for the majority of them. A minority continue the journey across La Rioja without going to Gallocanta, heading across Tierra de Campos to La Nava Lagoon, following the old traditional route. Valverde (1952) described this migration route which they took across Castile, which was the usual route that they used to get to the wintering areas in south-western Iberia until the first half of the 20th Century, to arrive in Salamanca, Extremadura, Andalucía and Portugal. The desiccation of the majority of wetlands on this route (La Nava and others) produced a change of strategy and in the 1970s (Fernández Cruz 1982) they began to migrate through the centre of the Peninsula from Gallocanta, following the route with staging posts at some reservoirs in Castille-La Mancha, such as Buendía. After crossing the centre of the country, they spread across La Mancha lands (reaching Fuente de Piedra in Málaga), while some occupied neighbouring parts of Toledo, or continued to Ávila, Salamanca, Valladolid and Zamora. The bulk will continue to Extremadura, some via the Valdecañas reservoir to spread across Cáceres province, others via the Cíjara Valley to Orellana, entering the Central Zone of Extremadura (Upper Guadiana Valley) where they rest and feed, using this area as a corridor that leads them to spread throughout the region: Portugal, northern Córdoba, the Sevilla area, Doñana and La Janda, from where a few hundred may cross the Straits of Gibraltar to spend the winter in Morocco. There is also a corridor in eastern Spain which takes them to northern Africa without needing to cross at the Straits. This is the main route that cranes use, some 400,000 birds using it each year.



Map nº 3: Principal routes followed by European cranes on migration.

Migration begins with the northern-most birds, where bad weather events occur earliest and days shorten rapidly. This photoperiod marks the first movements and these most northerly birds are those that will fly furthest and travel the most kilometers. On the other hand, Central European cranes usually fly shorter distances and winter in nearer latitudes to their breeding areas.

In general, autumn migration is more leisurely and can last more than two months (from October to December), until the breeding territories have been abandoned. It can even last into January, as mild winters are becoming more frequent in central Europe and allow many cranes to stay in or near their breeding area, and when a bad weather front arrives they move to the west-southwest, even crossing the Pyrenees, depending on the strength of it.

Cranes will be concentrated in certain favourable areas, where there is abundant food and there are tranquil roost sites, and as the days get shorter and inclement weather increases they begin to leave these areas and head for the wintering areas. Autumn migration generally occurs in waves, so that during certain days or a particular week a major percentage of the population moves on, while during the rest of the season they migrate in smaller flocks. Weather is the key factor and each year migration happens differently, with one or two main waves.

When they reach the Pyrenees, they usually cross the mountains into Navarra, although a small proportion enters by Irún and also, in lower numbers, into Huesca, as well as via Andorra and Perpignan, when they are coming from central France or The Camargue.

Those that enter through the Basque Country usually continue along the old Castilian route, which crosses Palencia (La Nava lagoon), heading for the dehesas and wetlands of Salamanca and Zamora, while those that enter through Navarra and Huesca generally head for Gallocanta lagoon, to stop for a few days, but sometimes they may be delayed if the wind

is unfavourable. They continue their journey to the south of the Sistema Central mountains, the great majority moving to the south-west and south of Iberia.

The majority of those that enter via the Andorran or Catalan Pyrenees also head for Gallocanta lagoon, though a small proportion continues down the east coast, leaving a few wintering birds at El Hondo reservoir, heading for north Africa, towards Algeria. Others migrate over the Balearic Islands, flying over the sea. They probably come from northern Italy or The Camargue, and although some birds may winter in Majorca, the majority of them continue to northern Africa.



Map nº 4: Autumn migration through Spain

On the other hand, spring migration is much faster, as adults are in a hurry to arrive at their breeding areas, so it usually lasts just a month, between the middle of February and the start of April; the bulk of migration taking place in the last week of February. They leave the wintering areas mid-morning, when thermal air currents form, and migrate determinedly with short breaks. Extremenian cranes usually have a break at Valdecañas reservoir (Cáceres) if they are coming from the most westerly areas, while those from the Central Zone usually stop at Buendía Reservoir

(Guadalajara/Cuenca). For the next break, they will arrive at Gallocanta Lagoon (Teruel/Zaragoza), where the majority of adults will set off again the next morning, and, depending on the wind, they will cross the Pyrenees from Navarra or will make another stop at Sotonera Reservoir (Huesca). If they cross they will continue to the centre of France, taking another break in the centre of the country before arriving at Lac du Der (Chantecoq). Once here, and after another stop (which may be for a few days) they head through Belgium,

Luxembourg and the Netherlands, making for northern Germany, where they may stay a few days or weeks before returning to their breeding areas during March, while the Baltic and Scandinavian birds don't arrive until the end of March or early April.

At Sotonera (Huesca), if wind conditions allow it, cranes cross the mountain range through Huesca's valleys or even from Navarra's; sometimes the wind pushes them further east and they go through Catalonian valleys, especially those in Lleida, although many also go through Gerona's valleys. Many of them also come from Gallocanta, pushed by El Cierzo (strong north-west wind). They then go on to the Camargue, from where they may go north (Lac du Der) or via the Jura to Austria, or even take the route to the south of the Alps and make for Hortobagy from northern Italy.

The return routes are usually the same as the southbound ones, although routes to the north of the Alps from France to Hortobagy have been documented. Thanks to birds carrying GPS/GSM transmitters, some Lithuanian families are being tracked (Perzhu, 2018, *pers.com.*) as well as Estonians (Ojaste *pers.com.*), which take the route to the south of the Alps in autumn then return by the French route, although some of them, particularly young birds, take the autumn route without hesitating to fly over the sea. Some birds even make a loop on migration, when in autumn they go south on the Hungarian route to northern Africa then return through central Europe, as Vilja did in 2018 (Ojaste *pers.com.*).



Map n° 5: Spring migration through Spain

WINTERING

The wintering cranes of the western population are distributed mostly through north African countries, such as Tunisia, Morocco and Algeria (we do not know if any go to Libya), the Iberian Peninsula (Spain and Portugal) and also in France, Germany, Poland and Belgium, most recently (2021/22).

The Moroccan population is estimated at around 1,000 individuals (Thevenot & Salvi). Counts done by the Migres Foundation in recent years, except those of the pandemic, have confirmed this figure, although in January 2018 they counted 1,875 (Onrubia *et al*). Regarding the size of the wintering populations in Tunisia and Algeria, there is little recent information. Tunisia could have between 3,500 and 9,000 individuals (Amari & Zafzaf 2013) and the Algerian population could be estimated as at least 3,770 individuals (Hand & Charfi-Cheikhouha 2011).

58% of the wintering population is currently concentrated in the Iberian Peninsula, with 265,000 birds in Spain (55%) (Román 2022) and 14,327 in Portugal (3%) (Cruz pers.comm.), followed by the French population, for which the last census counted 176,620 cranes (37%) (Deschates *et al* 2022). For a few decades now the wintering population in Germany has been increasing and is estimated as at least 20,000 birds (4%), and recently birds have also been staying in Poland, with 6,578 (1.3%) in December 2021 and 123 in January 2022 (Broniarek). 250 birds also stayed in Belgium during December, originating from the German population.

Looking at these data, we can say that in the last year the European wintering population during December 2021 was 482,525 cranes.

SUMMER AND FIRST ARRIVALS

To indicate the different provinces and countries, we use the following abbreviations:

Provinces: LU: Lugo, C: Coruña, OU: Ourense, PO: Pontevedra, AS: Asturias, CT: Cantabria, NA: Navarra, LR: La Rioja, G: Gipuzkoa, AR: Araba, BI: Bizkaia, GI: Girona, B: Barcelona, LL: Lleida, T: Tarragona, Z: Zaragoza, HU: Huesca, TE: Teruel, V: Valencia, CS: Castellón, A: Alacant, MU: Murcia, IB: Balearic Islands, BU: Burgos, P: Palencia VA: Valladolid; LE: León; ZA: Zamora, SA: Salamanca, AV: Ávila, SO: Soria; SG: Segovia, M: Madrid, CU: Cuenca, AB: Albacete, GU: Guadalajara, TO: Toledo, CR: Ciudad Real, CC: Cáceres, BA: Badajoz, CO: Córdoba, SE: Sevilla, H: Huelva, CA: Cádiz, MA: Málaga, AL: Almería, GR: Granada; J: Jaén; IC: Canary Islands.

Countries: Portugal (PT) France (FR) Italy (IT) Germany (GE) Hungary (HU) Israel (IS) Sweden (SE) Poland (PL), United Kingdom (UK).

Some individuals, mostly juveniles, were seen during May, but less than a dozen birds actually summered in Spain. The first migrants were seen at the end of August and from the second week of September the first groups were detected, although it wasn't until the first week of October that the first birds began to arrive in wintering areas.

05/05/22: 1 at Casar de Mijadas (CC) Gugoi Sánchez.

06/05/22: 3 at Alfaro (LR) Jesús Ucha.

08/05/22: 4 at La Mueda reservoir (NA) Jon Sola, Javi Sola.

10/05/22: 1 at Pas reservoir (HU) Juan C. Albero.

12/05/22: 2 at Madrigalejo (CC) Bob Foehring, Martin Kelsey; 2 at Gallocanta lagoon (TE/Z) Sabi Martínez, Antonio Torrijo; 3 at Pitillas lagoon (NA) Ricardo Rodríguez, Jesús Mari Lekuona.

18/05/22: 1 juvenile with a deformed beak at La Veguilla lagoon (CR) M^a José Velasco, Juan A Calvo, Álvaro Nicolau.

22/05/22: The same bird remains at this lagoon, Mark Robbins, Jesús Porrero.

23/05/22: 2 at Gallocanta lagoon (TE) Javier Mañas.

28/05/22: 1 at Ejea de los Caballeros (Z) Ricardo Rodríguez.

29/05/22: 1 at Ejea de los Caballeros (Z) Thomas Rickfelder.

07/06/22: 2 at Gallocanta lagoon (TE) Antonio Torrijo.

20/06/22: 2 at Alcañiz saline lagoons (TE) Javier Vera.

21/06/22: 2 at Gallocanta lagoon (TE) Esther Yera.

22/06/22: 2 at Alcañiz saline lagoons (TE) Esther Yera.

29/06/22: 3 at Gallocanta lagoon (TE) Francisco J. Sampietro, Antonio Torrijo.

03/07/22: 3 at Gallocanta lagoon (TE) Antonio Torrijo.

20/07/22: 3 at Gallocanta lagoon (TE) Francisco J. Sampietro.

21/07/22: 1 at Alcañiz saline lagoons (TE) Esther Yera, where it was seen the following day. This is the same bird with a deformed beak seen in May at La Veguilla lagoon.



Image nº 2: Crane with a deformed beak at Alcañiz saline lagoons (TE). Photo: Esther Yera.

30/07/22: 2 at Monteagudo de las Vicarías reservoir (SO) Andrés Riaguas, Jesús Ruiz, José L. Hernández.

06/08/22: 2 at Monteagudo de las Vicarías reservoir (SO) Gregorio Chaguaceda.

27/08/22: 4 in flight, Ebro delta (T) José M^a Rojo.

09/09/22: The crane with a deformed beak remains at Alcañiz saline lagoons (TE) Miguel A. Pardo.

10/09/22: 19 over Ainsa (HU) Alberto Marín.
 14/09/22: 1 at El Taray lagoon (CR) Javier Gómez.
 15/09/22: 100 over Valladolid, José M. Onrubia, Carlos Espeso.
 18/09/22: 2 at Monteagudo de las Vicarías reservoir (SO) Juan L. Hernández,
 21/09/22: 1 at Las Cañas reservoir (NA) Arturo Fuerte,
 24/09/22: 1 at Las Cañas reservoir (NA) Javier Robres; 1 at Alcañiz saline lagoons (TE)
 Javier Vera, Jose M^a Sánchez.
 25/09/22: 150 over Montoro (CO) David Fraser, Leach Ramsay, Tracee Geernaert.
 28/09/22: 7 over Agoncillo airport (LR) Jesús M^a Gutiérrez.
 30/09/22: 4 over Montijo (BA) Arturo Pérez.
 01/10/22: 13 over Valereña (Z) Ignacio Arrospide; 7 in flight over Cape Ses Salines, Mallorca
 (IB) Mateu Garau.
 02/10/22: 25 over Fuentes de Marcelo (HU) Miguel Vallespir.
 04/10/22: 1 flying over the outskirts of Málaga, Julián Muñoz.
 08/10/22: 2 at Peña Hueca lagoon, Villacañas (TO) Ángel Velasco; 4 at La Nava lagoon (P)
 Fernando Jubete; 4 over the River Duero in Soria, Jesús Ruiz; 4 at Las Cuerlas (Z) Uge
 Fuertes, Antonio Torrijo; 12 over Olius (LL) Joan Gimésterelles.
 09/10/22: 1 at Monteagudo de las Vicarías reservoir (SO) Juan P. del Álamo, Juan L.
 Hernández, Jesús Ruiz; 3 arrive at El Hoyo lagoon (AV) José M^a García, Arón Blázquez; 7
 at Gallocanta lagoon (Z) Pepe Sánchez, Javier Millán; heard at Alcázar de San Juan (CR)
 Benito Montiel; 50 over Sotos de Alfaro (LR) Jorge Antón; 1 at Sotonera reservoir (HU) Silvia
 Duque, Francisco Quesada.



Map n° 6: Summerring (red) and first arrivals (yellow)

POST-BREEDING MIGRATION

Discrete entrance of cranes to the peninsula, occupying some winter areas

10/10/22: 4 at Borbollón reservoir (CC) Agustín Iglesias; 9 at Gallocanta (TE) Antonio Torrijo; 2 at Valdesalor reservoir (CC) Raúl Granados.

11/10/22: 11 at Gallocanta (TE) Antonio Torrijo; 200 over El Molar (M) Juanjo Alarcia (ARDEIDAS).

12/10/22: 2 at Villarreal (BA) Francisco Macías, Francisco Bernáldez; 25 over Erro (NA) Sandra Pineda; 24 over Pamplona (NA) Gorka Gorospe; 70 over the River Gállego, Biscarrués (HU) Pablo Vallés; 12 at Valdecañas reservoir (CC) Vicente Risco.

13/10/22: 84 (3 juveniles) at Gallocanta (Z/TE) in the morning, Antonio Torrijo; 5 at Los Canchales reservoir (BA) Joaquín Vázquez; group over La Alfranca (Z) Carmina Franco; 20 over La Puebla del Alfindén (Z) Javier Sanz; 30 over Zaragoza, Javier Domínguez; 30 over Madrid, Raúl Madrid; 23 at Sotonera reservoir (HU) Pedro Torres; 14 over San Martín de la Vega (M) Félix Arribas; group over Alfaro (LR) María Calahorra; 19 at Pitillas lagoon (NA) Juan I. Deán; 50 over Aguilarón (Z) Javier Sierra, Irene García; 40 over Ricla (Z) Javier Traín; 580 at Gallocanta (Z/TE) in the evening, Antonio Torrijo; 23 at Sotonera reservoir (HU)..

13 over Lindus (FR) Ander Txufis; 174 over Organbidexka (FR) Paul Capbern et al.



Image nº 3: First cranes at Los Canchales reservoir (BA). Photo: Joaquín Vázquez.

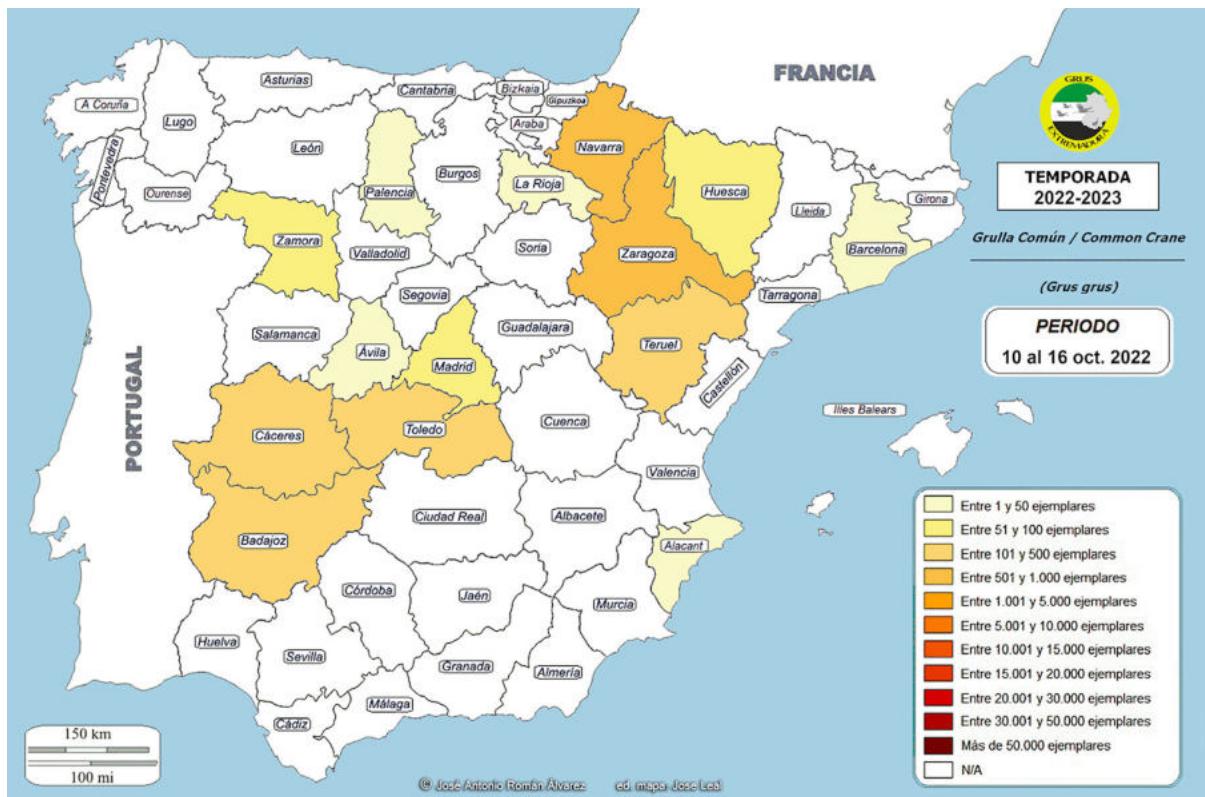
14/10/22: 57 over Fuendejalón (Z) and 3 over Figueruelas (Z) María Berna; 100 over the River Tajo (TO) Pepe Barroso; 19 over Casserres (B) Albert Codina; 394 at Gallocanta (Z/TE) Pilar Edo.

15/10/22: 25 at dawn at Borbollòn reservoir (CC) Miguel Todón; 130 at dawn at Peñahueca lagoon, Villacañas (TO) Ángel Velasco; 3 at La Nava lagoon (P) Fernando Jubete Guzón; 3 arrive at Sotonera reservoir (HU) Eduardo Gracia; 40 (3 juveniles) at Los Canchales reservoir (BA) José A. Román; 125 at Navalvillar de Pela (BA) Ángel López; 70 over García de Sola reservoir (BA) José Mª Traverso; 50 over Quero (TO) Jesús Navarro; 18 heading to Valdecañas reservoir (TO/CC) Adrián Illescas (ARDEIDAS); 60 roost at Navalcán reservoir (TO) Miguel Jiménez (ARDEIDAS); 5 at Peraleda de la Mata (CC) Vicente Risco; 82 over Sureste Natural Park, San Martín de la Vega (M) Ricardo Rodríguez; 18 at El Hoyo lagoon (AV) Arón Blázquez; 5 at El Hondo Natural Park (A); Luis Martínez-Mena, Ricardo Moral.

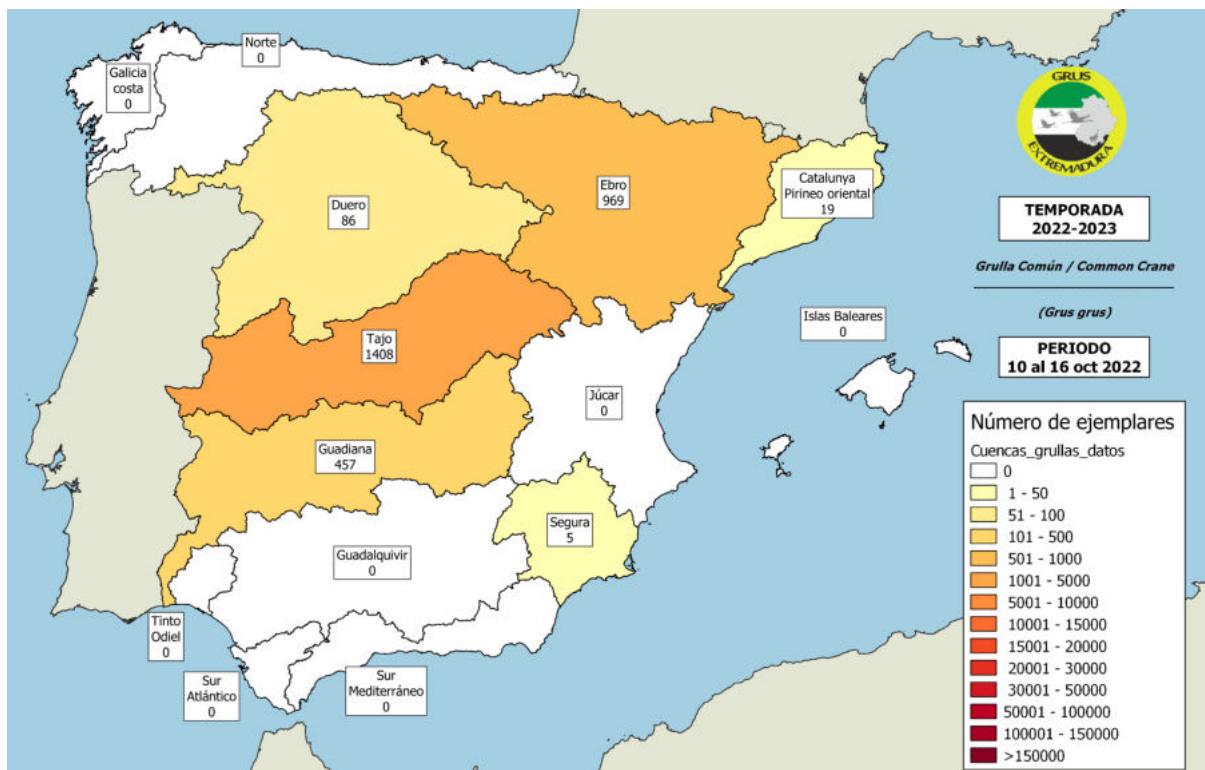


Image nº 4: Cranes sleeping at the Sotonera reservoir (HU) Photo: Eduardo Gracia.

16/10/22: 78 over Quero (TO) David Serrano (ARDEIDAS); 66 at Villafáfila nature reserve (ZA) José M. San Román; 207 at Gallocanta (Z/TE) Antonio Torrijo; 33 roost at Moheda Alta reservoir, Navalvillar de Pela (BA) Ángel López and 608 roost at Cubilar reservoir, Logrosán (CC) José A. Sánchez.

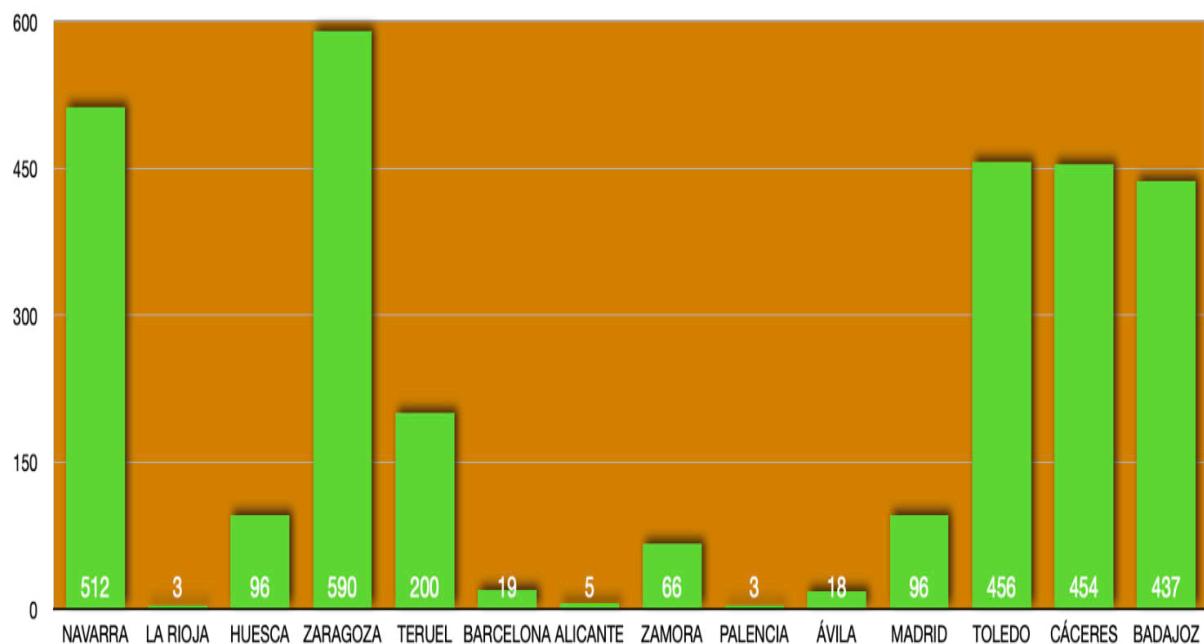


Map nº 7: Crane migration by provinces, October 10 to 16



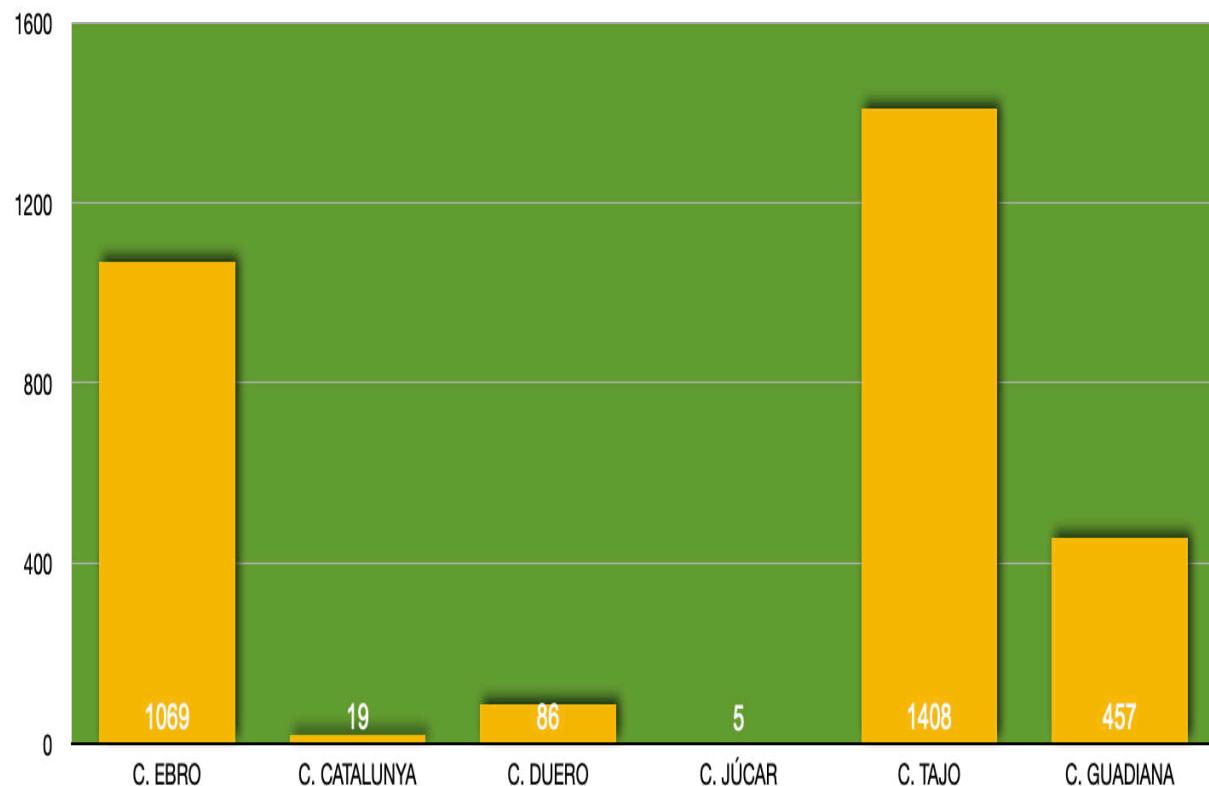
Map nº 8: Cranes migration by catchment areas, October 10 to 16

Week of October 10 to 16



Graphic nº 1: Crane migration by provinces, October, 10 to 16

Week of October 10 to 16



Graphic nº 2: Crane migration by catchment areas, October 10 to 16

A week of transition, with few movements in the Peninsula, although there were massive departures from Germany and France.

17/10/22: 1 at El Campazo lagoon, La Aldea del Obispo (CC) Neil Renwick; 28 at Grande lagoon, Villafáfila (ZA) Felipe Rosado; 22 (1 juvenile) at El Hoyo lagoon (AV) José M. García; 39 over Mendioroz (NA) Miguel Minondo, 2 over Txingudi, Irún (G) Itziar Gutiérrez, Martín Larrañaga.



Image nº 5: Cranes at Los Canchales reservoir (BA). Photo: José M^a Benítez

18/10/22: 10 at Riolobos weir (SA) Andrés Hernández; 84 over Fuendejalón (Z) Rocío Sus; 50 at Manjavacas (TO) Luis Sánchez; 48 at Los Canchales reservoir (BA) José M. Benítez; 73 in Txingudi marshes (G) Paul Ortuzar, Itziar Gutiérrez, Martín Larrañaga; 55 roost at Borbollón reservoir (CC) Miguel Todón; 71 arrive at Gallocanta lagoon (Z/TE) Antonio Torrijo; 5 at San Salvador reservoir (HU) Jan Verhoeve; 23 over Andoain (G) Nerea Ixmukan; 100 over Inbuluzketa (NA) Teresa Subiza.

19/10/22: 10 over Salburua (AR) Manu Sobrino; 5 over Calamocha (TE) Manu Cayuela; 29 over Pamplona (NA) Rajen Ayerra.

49,300 migrating over Marburg and Hesse (GE) heading SW, Martín Kraft.

20/10/22: 4 at Boada de Campos lagoon (P) Fernando Jubete Guzón; 166 over Irún (G) José F. Esparcia; 45 over Peñacerrada Pass, San Vicente de la Sonsierra (LR); Jorge Alonso; 3 over Zarautz (G) Alexander Carriel; 27 over Donostia/San Sebastián (G) Olatz Aizpurua; 137 over Hondarribia (G) Iñaki Sanz-Azkue; 1 at Casa de Hitos, Madrigalejo (CC) Martin Kelsey; 84 over Pamplona (NA) Gema Marco; 359 in Zarzalejo rice fields, Logrosán (CC) Ángel López; 22 (1 juvenile) at El Hoyo lagoon (AV) Jorge Leonor, Eneko Leonor; 470

roost at Gallocanta lagoon (Z/TE) S.A.R.G.A.; 1 at Urdaibai (BI) Jon Maguregi; 175 in Tablas de Daimiel National Park (CR) Manuel Carrasco; 34 over Vitoria/Gasteiz (AR) Azaitz Unanue; 5 at Horcajo reservoir, Moros (Z) Javier Pi.

75,000 migrating over Marburg and Hesse (GE) heading SW, Martín Kraft.

21/10/22: 4 over Casar de Mijadas (CC) Fernando Yuste; 9 over Santurzi (BI) Roberto Herrero; 3 at Urdaibai (BI) Carmelo de Dios; 32 over Alcalá de Henares (M) Cristina Pintor; 2 arrive at Alcañiz saline lagoons (TE) where they meet up with the crane "piquituerta" ["crossbill"] Esther Yera; 7 at San Salvador reservoir (HU) Victoria Torrente, Jesús Lavedán; 3 at El Ejido, Navalmaral de la Mata (CC) Vicente Risco.

1,090 over Organbidexka (FR) Paul Capbern et al.

22/10/22: 20 at Zarza de Granadilla (CC) Hugo Sánchez; 78 at Borbollón reservoir (CC) Miguel Todón; 667 at Gallocanta lagoon (Z/TE) Antonio Torrijo; 15 over Calamocha (TE) Pedro Herrero; 301 over Pamplona (NA) Rajen Ayerra; 7 at Figarol (NA) David Miqueleiz; 89 at Manjavacas lagoon, Mota del Cuervo (CU) José V. Oropesa; 32 at Salburua (AR) Beñat Guevara; 38 over Aia (G) Héctor González; 20, 65, 20 over Baztan (NA) Xabier Etxarri; 11 over Roncesvalles (NA) Gorka Gorospe; 60 over Auritz (NA) Sandra Pineda, Gorka Gorospe; 192 at La Zolina reservoir (NA) María Durán; 9 set off and 53 arrive at Las Cañas reservoir , Viana (NA) Óscar Gutiérrez ; 48 in Arguedas rice fields (NA) Daniel Velasco; 95 at Sotos de Alfaro (LR) Andrés Armendáriz; 2 over Leiva (LR) Antonio; 36 over Calahorra (LR) Jesús Mª García; 26 over Buñuel (NA) Verónica Morales, Alfredo Sánchez; Ángel Felipe; 50 over Santa Lucía de Ocón (LR) Jon Serrano; 112 over Tarazona (Z) María Berna; 30 over Fuentelahiguera de Albatages (GU), JJA; nocturnal passage over Leiva (LR) José I. Sáenz; 63 in Villafáfila nature reserve (ZA) José Barrueso; 15 over Montalegre valley, Tiana (B) Gabriel González; 1,400 on Zarzalejos plain, Logrosán (CC) Seppo Hjerpe; 82 at Peñahueca lagoon (TO) Jesús Ruíz; 10 over Olmedo (VA) Alejandro Sanz; 15 over Tabladillo valley (SG) Toni Alonso; 150 at Leiva reservoir (LR) Arcadi Atxa; 1 over Irún (G) Aimar Hernández; 450 at La Zolina lagoon (NA) Enea Ardaiz, José Ardaiz; 13 over Herrera de Duero (VA) Federico Iglesias.

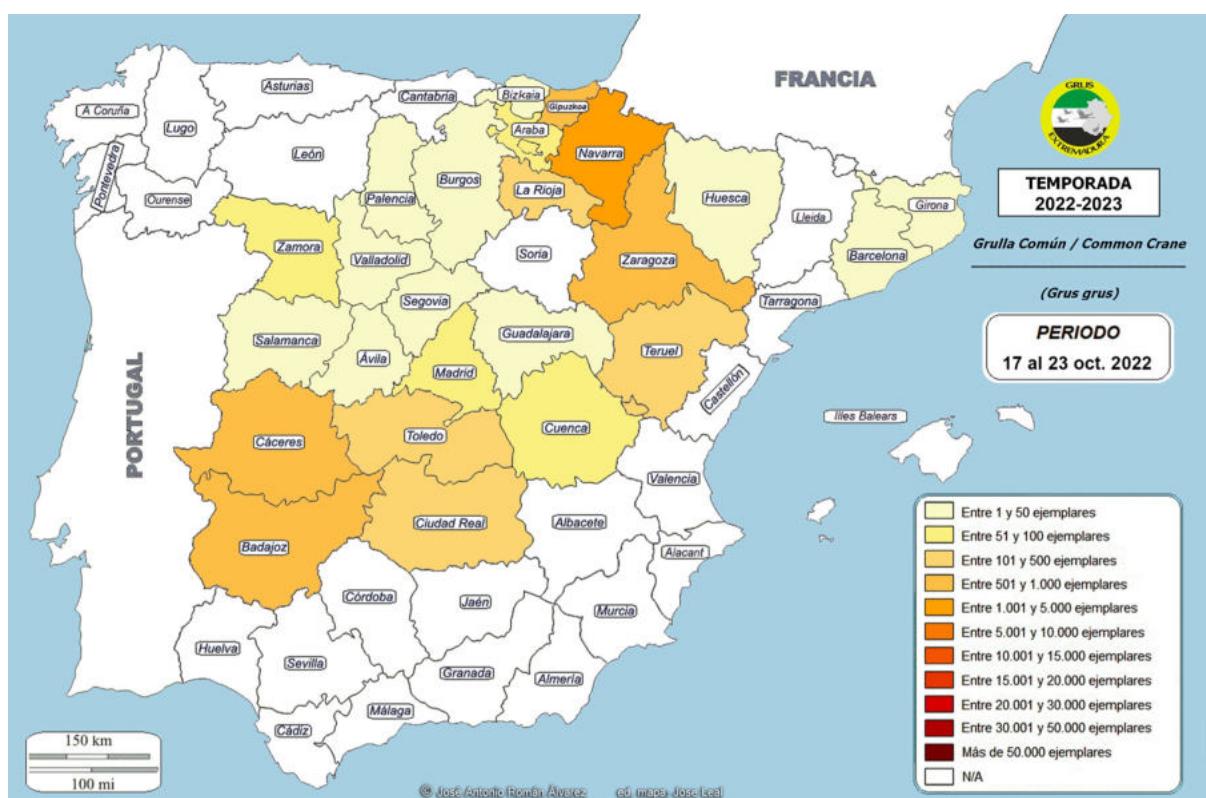
Several tens of thousands set off from Der (FR) Aurelien Deshartres; 282 over Organbidexka (FR) Paul Capbern et al.

23/10/22: 36 over Leiva (LR) José I. Sáenz; 35 over Sotos de Alfaro (LR) Andrés Armendáriz; 15 over Galilea (LR) Pedro Sáenz; 32 at Santa Teresa reservoir (SA) Vicente G. Garrudo; 4 over Montijo (BA) Arturo Pérez; 3 over Sanchidrián (AV) Víctor Coello; 41 (2 juveniles) at El Hoyo lagoon (AV) Arón Blázquez, Luis J. Martín, Miguel Martín; 55 at La Zolina reservoir (NA) Haritz Sarasa; 75+63 around Pitillas lagoon (NA) and 42 at Dos Reinos lagoon (NA) Gonzaga Santesteban; 21 over Villanueva del Pardillo (M) Patricia Alonso; 24 over Miravete (CC) Pedro Gómez; 11 at Dehesa Nueva, Saucedilla (CC) Alberto Rubio; 25 at Valmayor reservoir (M) David Fernández; 786 roost at Cubilar reservoir, Logrosán (CC) José A. Sánchez.

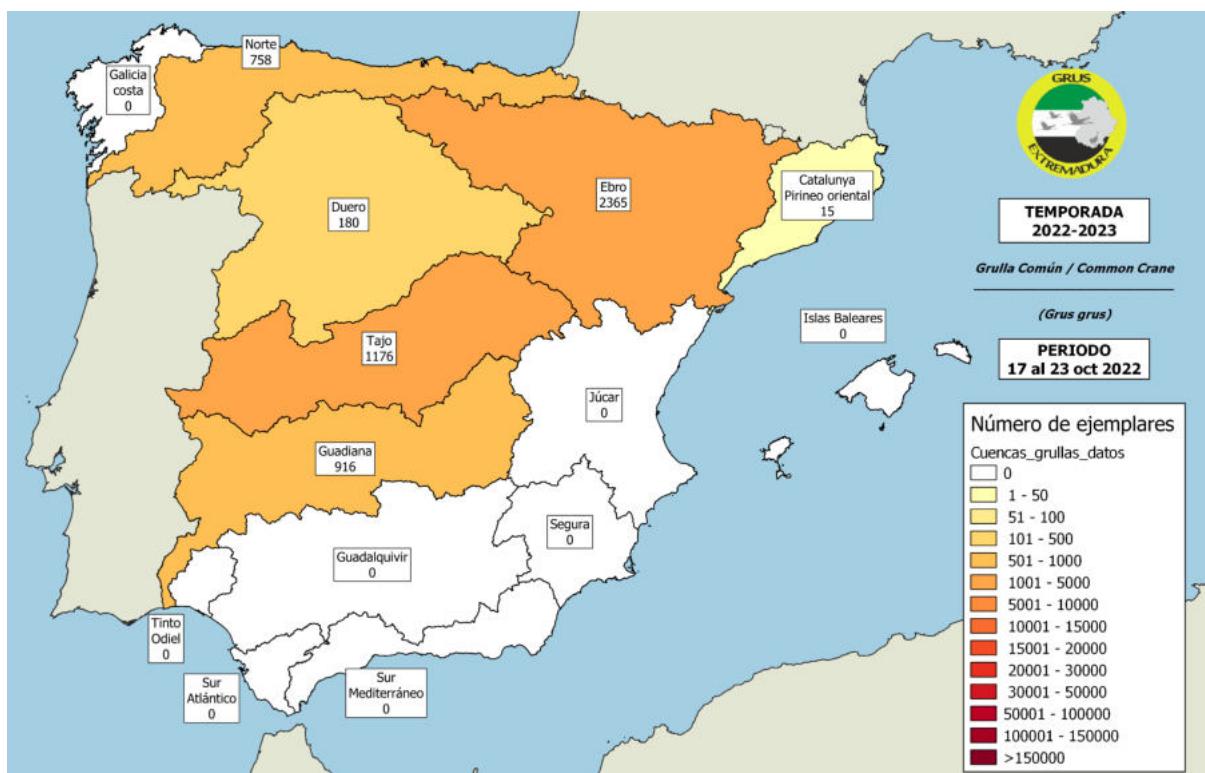
68,500 are censused at Lac du Der (FR) LPO Champagne-Ardenne; >10,000 in Lorraine (FR) Alain Salvi; 41,000 migrating over Marburg (GE) Martín Kraft.



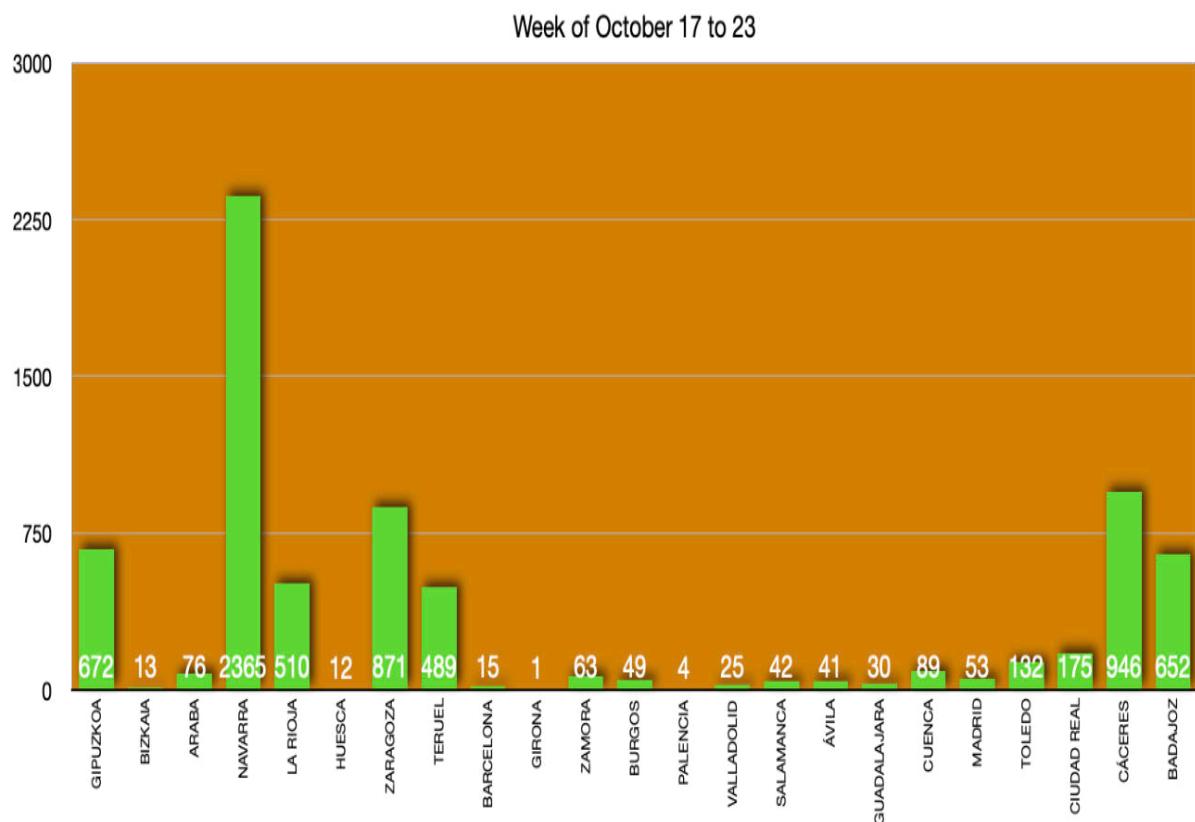
Image n° 6 : Cranes at de Zarza de Granadilla (CC) Photo: Hugo Sánchez.



Map n° 9: Crane migration by provinces, week 17 to 23 October

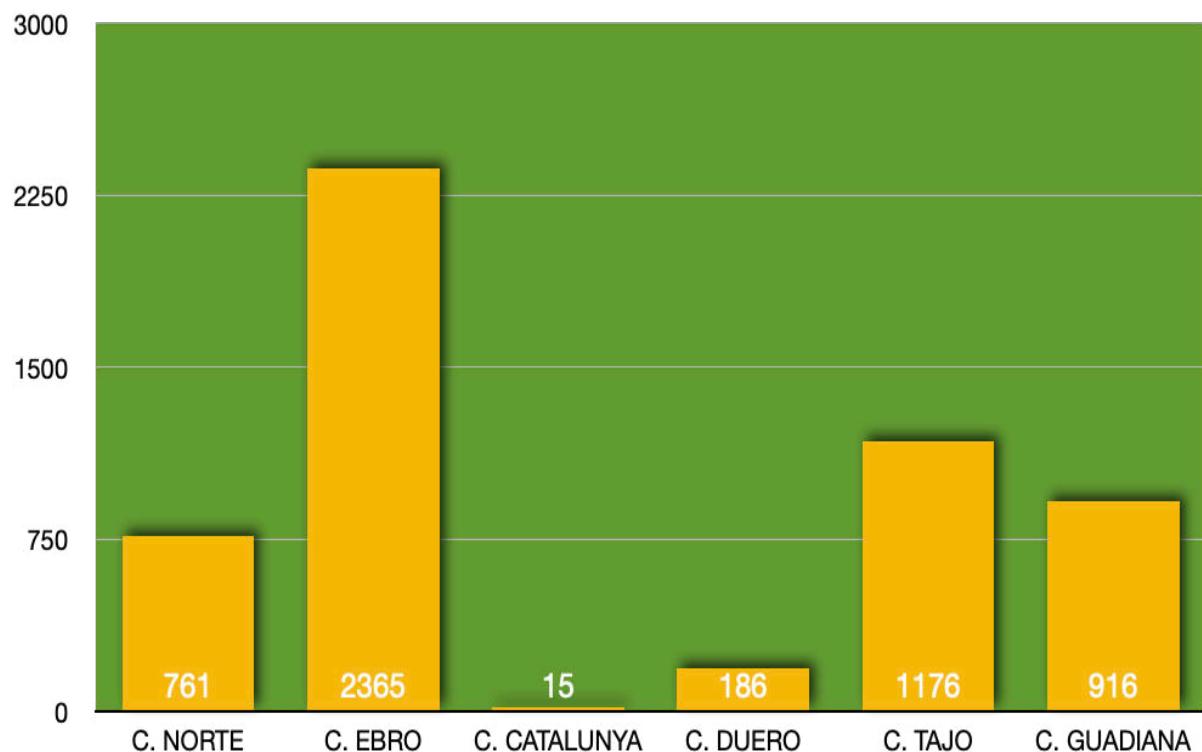


Map nº 10: Crane migration by catchment areas, week 17 to 23 October



Graphic nº 3: Crane migration by provinces. Week 17 to 23 October.

Week of October 17 to 23



Graphic nº 4: Crane migration by catchment areas. Week 17 to 23 October.



Image nº 7: Crane landing. Photo: Michel Viskens.

Migration intensified in the second part of the week, which can be considered as the first wave of the season, following the movements in recent days in Central Europe.

24/10/22: 32 at La Nava lagoon (P) Juana M^a Guzón, Fernando Jubete Guzón; 130 over Sotos de Alfaro (LR) Andrés de la Torre; 100+ set off from Gallocanta lagoon (TE/Z) Carmina Franco, Francisco J. Sampietro; 109 over Mirandilla (BA) Ángel Sánchez; 12 over Béjar (SA) M^a José Benítez; 9 over Aíbar (NA) Jon Sola; 26 over Cobisa (TO) Ángel Rodríguez; 91 in Villafáfila nature reserve (ZA) José J. Orduña; 30 over Fuentes de Valdepeso (P) Alberto Laiz; 9 over Odón (TE) Antonio Torrijo; 1,050 + 1,400 over the Sierra de Aíbar (NA) Jon Sola, Javi Sola; 160 over Carcastillo (NA) David Miqueleiz; 91 roost at Borbollón reservoir (CC) Goyo Naharro; 9 over Txingudi (G) José F. Esparcia, Ramón Otamendi; 17 over Atapuerca lagoon (BU) César Díaz, Marcos Barrios, Pedro Arratibel; 112 over La Zolina reservoir (NA) Teresa Subiza; 50 over Pamplona (NA) Haritz Sarasa; 11 over Aranjuez (M) Sonia Wandosell, Diego Martínez; 6 over San Mamés de Abar (BU) Reyes Baciero; 30 over Abades (SG) Eduardo García; 41 over La Muela (Z) Jesús Capdevilla; 9 over Valladolid; 23 in Doñana National Park (SE) Megan Baldenow; 9 over Hernán Cortés (BA) Jorge Sáfara; nocturnal arrival at Gallocanta lagoon (Z/TE) Javier Mañas; nocturnal migration over southern Navarra, Jesús M. Lekuona.

15,483 over Lindus (FR) Gabi, Felipe, Ander; 1,506 over Lizarreta Pass (FR) Théo Anby et al; 3,820 over Organbidexka Pass (FR) Paul Capbern et al.



Image n° 8 : Cranes over Atapuerca lagoon (BU). Photo: Marcos Barrios

25/10/22: 1,500 at dawn at Gallocanta lagoon (Z/TE) Antonio Torrijo; 186 over Sotos de Alfaro (LR) Andrés de la Torre; 90 over Rincón del Soto (LR) Jesús Ledo; 60 over Murillo de Calahorra (LR) Valentín; 20+320 over Sotos de Alfaro (LR) Jesús Ucha; 35 over the River

Hnaires (GU) Fernando Canalejas (DALMA); 67+34 over Sotos de Alfaro (LR) Andrés Armendáriz; 139 over Ventas del Baño, Río Alhama (GU) Roberto Vega; 1 over Pineda del Mar (B) Toni Herrero; 18 over Salburua (AR) Eraztun Berdeka Basozanak; 19 at Riolobos weir (SA) Guillermo Rouco, Dani Hernández, Miguel Martín; 37 over Guadalajara, Sergio López; 89 (4 juveniles) roost at El Hoyo lagoon (AV) José Mª García; 2 over the River Manzanares, Madrid, Irene González; 7 over Cabanillas del Campo (GU) J Luis Ramos; 67 at Manjavacas lagoon (CU) Mª José Valencia; 15 over Toledo, Ángel Velasco; 300 resting at Sotos de Alfaro (LR) Andrés Armendáriz; 3 at Alange reservoir (BA) José A. Román; 36+65 over Alfaro (LR) Irigoyen Pérriz; 74 over Casseres (B) José Mª Picas; 40 over Nájera (LR) Héctor Magaña; 21 over Toledo, José V. Oropesa; 1 over Badajoz, José L. Vinagre; 400 over Borja (Z) Javier P. Valina; 9 over Lagartera (TO) César Clemente; 6 over Frandovínez (BU) David Angulo; 2 at Castelló d'Empúries (GI) Raúl Bastida; 49 over San Miguel (GI) Álex Fonollosa; 14 over Irún (G) David Santamaría; 125 at Villafáfila nature reserve (ZA) José J. Orduña

26/10/22: 50 over Viana (NA) Eduardo Ayala; 170 over Calahorra (LR) Eugenio Montelio; 6 over Mirueña de los Infanzones (AV) José Mª García; 100 over Cofín (LR) Jesús Ucha; 40 at Las Cañas reservoir (NA) José Carlos; 2 over Txingudi (G) José F. Esparcia; 9 over Villanueva de la Cañada (M) Edmund Bell; 110 over Pamplona (NA) and 20 over Biurrun (NA) Gorka Gorospe; 73 over Perdiguero reservoir (LR) Tom O'Shea; 96 over Monteagudo (NA) Gorka Gorospe; 250 over Alfaro (LR) David Mazuelas, Alberto Parada; 5 over Santa Teresa reservoir (SA) Vicente G. Garrido; 13 at Sotonera reservoir (HU) Esther Yera; 450 over Villa de Ocón (LR) and 40 over Sesma (NA) Jorge Alonso; 35 over Guadalajara, Jesús Mª Serrano (DALMA); 300 over Pamplona (NA) Juan I. Deán; 42 over Castellnou de Bages (B) Chemi Ibáñez; 4 over Salburua (AR) Guardas Anillo Verde; heard over Carabanchel (M) Chemi Ibáñez; 46 over Rivas Vaciamadrid (M) Andrés M; 20 over the river at Leza (LR) Javier A. Vivian; 43+40+36 over Las Cañas reservoir (NA) Mikel GZ, Nan Martic, Teresa Subiza, Serafín Alarcón; 1,000 over Loza reservoir (NA) Gaspar Zaldua, Jorge Nubla; 1,877+120+41+40+90+70+110 over Pamplona (NA) Raúl Pascual, Giancarlo Velmarch, Gaspar Zaldua, Patricia Andrés, María Durán, Gorka Gorospe; 124 over Campos de Sádaba (NA) Jesús M. Lekuona; 22 over Quinto (Z) Alfredo Sánchez; 60+130 over Arnedo (LR) Chema; 50 over Aldeanueva (LR) Pilar Azpiroz; 98 at La Loteta reservoir (Z) Javier Pi; 60 over San Tomán (LR) Irene Pinto; 330 over La Dehesa reservoir (Z) and 306 over El Barranco (Z) Gorka Gorospe; 2 over Atapuerca lagoon (BU) Pedro Arratibel.

14,749 over *Lindus* (FR) Jon Txufis; 814 over Lizarreta Pass (FR) Paul Capbern et al.

27/10/22: 2,305 roosted at La Zolina reservoir (NA) Jesús M. Lekuona; 31 over Murillo de Calahorra (LR) Daniel Mógica; 60 over Calahorra ((LR) Roberto Vega; 60 over San Tomán (LR) Irene Pinto; 13 over San Román de los Montes (TO) Francisco Rodríguez (ARDEIDAS); 1,409 at Valdepalacios, Logrosán (CC) José Mª Benítez; 120+29 over Aranjuez (M) Diego Martínez; 57 over Almoguera reservoir (GU) Juan L. Ramos; 22 over Madrid; 2 over Alcalá de Henares (M) Paula Fernández; 23 over Ávila, José Mª García; 138+393 over Oter (GU) Jorge Atance (DALMA); 8 over Villamediano de Iragua (LR) Sandra Vela; 50 over Aldeanueva (LR) Pilar Azpiroz; 60 over Ocón (LR) Jon Serrano; 70 over Ambroz lagoon (M) Esther Murciano; 1,000+140 over Autol (LR), where the was also nocturnal passage, Alberto Castillo; 50 over Vallecas (M) Vicente López; 22 at Campo Lugar (CC), 72 at Palazuelo (BA), 44 at Torviscal (BA) and 28 at Villar de Rena (BA) Seppo Hjerpe; 34 over the River Manzanares (M); 55 over Móstoles (M) IV González; 20 over Villaviciosa de Odón (M) Mª Jose M. Cenamor, José L. Machuca; 16 over Pinar de Valdebebas; 36 over Monte de El Pardo (M) Paco Torralba; 160 over Camarina de Esteruelas (M) Óscar Oeo; 25 over Calatayud (Z) Ángel Gonzalo; 13 over Villalpando (ZA); 171 in Villafáfila nature reserve (ZA) Noelia Fernández, José Mª S. Román; 12 over Orio (G)

Alain Britt; 280 over Artajona (NA); 33 at Sotonera reservoir (HU) Esther Yera; 150 over Torrijos (TO) Javier Martín (ARDEIDAS); 271 at El Hoyo lagoon (AV) José M^a García; 75 over Utebo (Z) Ignacio Romero; 24 over Valdebebas (M) Delfín González; 250 over Rincón de Soto (LR) Rafael; 75 over Villaciervos (SO) Juan P. del Álamo; 3,464 are censused at Gallocanta lagoon (Z/TE) S.A.R.G.A; 460 in rice fields at Moheda Alta, Navalvillar de Pela (BA) Ángel López; 57 over Almoguera (GU) José L. Ramos; 6 over Quintanilla de las Carretas (BU) César Díez; 40 over Ugena (TO) Chon Conde; 130 at Grévalos reservoir (TO) Antonio Honorato (ARDEIDAS); 71 at Ejea de los Caballeros (Z) Jesús Causape; 3 over Boadilla del Monte (M) Juan M. Pérez-García; 300 stop at Sotos de Alfaro (LR) Borja Sanz; 3 over Los Belones, Cartagena (MU) Carmen Martínez; 500 over the River Ebro at Pradejón (LR) José M^a Esquerro.

59,685 are censused at Der, LPO Champagne- Ardenne



Image nº 9: Cranes setting off from La Zolina reservoir (NA). Photo: Jesús M. Lekuona.

28/10/22: Nocturnal passage at 03:44h over Guadalajara; 141 at dawn at Los Canchales reservoir (BA) José A. Román; 8 over Ocón valley (LR) Jorge Alonso; 19 at Villafranca lagoon (TO) Julio García; 195 over Castrejón reservoir (TO) Javier Gómez; 40+28 over Las Rozas (M) Daniel Ordóñez; 4 over Inurritza (G) Ion Unzurrunzaga; 9 in rice fields at Cinco Villas /Z) Diego Uche; 20 over Ruecas (BA) Fernando Yuste; 125 over Valdecaballeros (BA) and 12 in the River Guadalupejo (BA) José M^a Traverso; 3 over Boceguillas (SG) Carlos Paulos (DALMA); 75 over Espinosa del Rey (TO) Antonio Honorato (ARDEIDAS); 350 over San Juan lagoon, Chinchón (M) Esther Murciano; 7 over Talavera de la Reina (TO) Concepción de las Vecillas; 24 over Olmos de Atapuerca (BU) Fede Sancho; 100 over Guadalajara, Fernando Canalejas (DALMA); 19 at Aldea del Cano (CC) Javier Caballero; 12 at Casas de Don Antonio (CC) Francis Martín; 22 over Cebreros (AV) Nacho Sevilla; 12 over Bernuy-Salinero (AV) Juan Parra; 55 at La Jarilla reservoir (CC) Álvaro García; 4 at

Cazalegas reservoir (TO) Javier Gordillo; 120 over Peñafiel (VA) Alberto Laiz, María Bueno; 30 at La Nava lagoon (P) Fernando Jubete Guzón; 17 over Valdemoro (M) José M^a Ruíz; 207 at Borbollón reservoir (CC) Miguel Todón; 18 over Navarrete (LR) Carmelo Martín; 4 over Las Bárdenas de Tudela (NA) Javier López; 110 at Santa Teresa reservoir (SA) Vicente G. Garrudo; 20 over Zorita de la Frontera (SA) Néstor Conde; 800 at Sotos del Ebro (LR) Borja Sanz; 28 over the Sierra de las Villuercas (CC) Joaquín Mazón; 1 in Santoña marshes (CT) Juan M. Pérez; 17 at Leiva reservoir (LR) Arturo Fuerte; 450 over Izarra (NA) Ángel Larumbe; 40 over Ezkaba hills (NA) Nayb Handoun; 1,000 in fields at Badostain (NA) Teresa Subiza; 25 over Sarracín (BU) Fernando Román; 17 over Cerezo del Río Tirón (BU) Arturo Fuentes; 18+16 over Ugena (TO) Juan Torres, Luis Conde; 1 at Oteo de Losa reservoir (BU) Iñigo Alonso; 50 at Atapuerca lagoon (BU) Pedro Arratibel; 2 over Jarandilla de la Vera (CC) Alejandro Rodríguez; 361 roost at El Hoyo lagoon (AV) Jorge Leonor; Juan R. Cuervo, Luis J. Marrín; groups arrive at night (20:00 h) over Berrueco (Z) at Gallocanta lagoon, Carmina Franco; 20 over Logroño at 21:50h (LR) Ricardo Martínez.

4,788 over Lindus (FR) Ander Gonzal; 2,014 over Organbidexka Pass (FR) Paul Capbern et al; 20,620 migrating over Marburg (DE) Martín Kraft.



Image nº 10: Cranes over Valdebebas (M). Photo: Delfín González

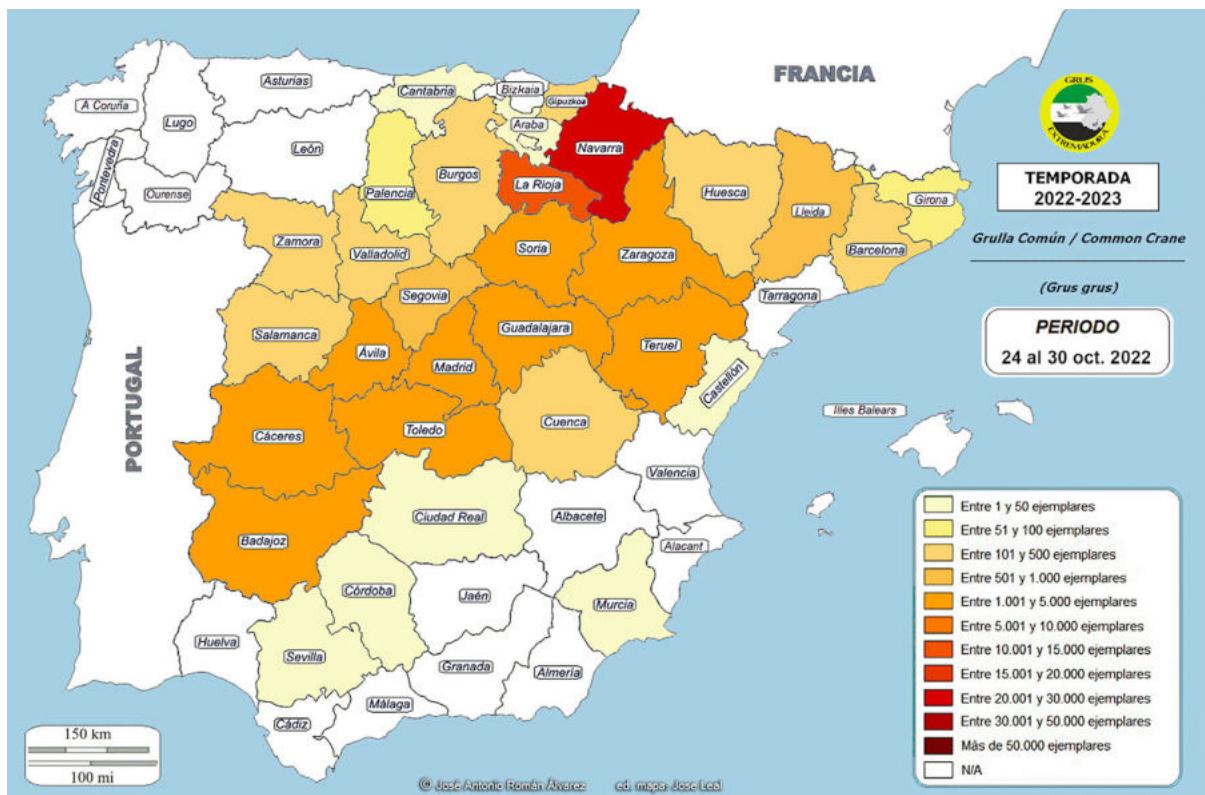
29/10/22: 350 roosted at Peña Hueca lagoon, Villacañas (TO) Ángel Velasco; 19 over Mirandilla (BA) J. Alfonso López; 5 roosted at Campazo pond, La Aldea del Obispo (CC) Neil Renwick; 14 over Villamanta (M) José A. Fimia; 16+30 over Almendralejo (BA) Luis Asuar; 27 at Santa Teresa reservoir (SA) Vicente G. Garrudo; 3,000 at La Zolina reservoir (NA) Jesús M^a Lekuona, Cuevas Ruíz; 90+70 over Villarroya (LR) Joserra Martínez; 140 in dehesas at Rosarito (TO/CC) Dave Langlois; 72 cross the Sierra de Zapateros (AV) M^a Cruz González, José M^a García; 1 over Lasarte-Oria (G) Olaia Garmendia, Julen Vega; 49 over Txingudi (G) José F. Esparcia; 48 over Segovia, José A. Campos, Eduardo Ramírez; 2 over Noain (NA) Juan I. Deán, Gonzalo Deán, Rajen Ayerra; 110 over Sotos de Ebro (LR) Borja

Sanz; 156 over Vera de Moncayo (Z) Esther Charles; 1 over Basilea gorge (Z) Gonzalo Peña; 12 over Villanueva de la Serena (BA) Luis Lozano; 60 over Rincón de Soto (LR) Andrés de la Torre; 600 over Jubera (LR) Jorge Alonso; 200 over Galilea (LR) Pedro Sáenz; 250 over Villa de Ocón (LR) and 50 over Santalucía de Ocón (LR) Sofía Casado; 50 over Villarroya (LR) Ana G.; 97 over Sotos de Alfaro (LR) Jesús Ucha; 120 over Tudelilla (LR) Ricardo Martínez; 8 over Marchamalo (GU) then over Cabanillas del Campo (GU) Santi, José Mª Gómez (DALMA); 50 over Alcolea del Pinar (GU) Javi Calvo (DALMA); 14 over Luesma (Z) Diana; 8+65 over Yunquera de Henares (GU) Isabel, Fernando; 384 in several flocks over Sotos de Alfaro (LR) Jesús Ucha, Ignacio Gámez; 24+37 over Ebro de Alfaro (LR) Ignacio Gámez; 148 in several groups over Cofín, Alfaro (LR) Ignacio Gámez; 136 over Alange (BA) Antonio Fernández; 12 over Torrecilla de la Jara (TO) Leoncio González (ARDEIDAS); 38+24 at Sotonera (HU) Silvia Duque, Francisco Quesada, Esther Yera; 124 circling over Sigüenza (GU) Ángel Sánchez ; 22 over Pago de San Clemente (CC) Martín Kelsey; 100 over Navalvillar de Pela (BA) and 15 at Ruecas weir, Logrosán (CC) Mª José M. Cenamor, José L. Machuca; 65 at Oliva de Plasencia (CC) Vicente Torres; 20 over Coca (SG) David Guillén; 1 over Fuentepiñel (SG) Jesús Risueño; 40 over Pontón Alto reservoir (SG) Bruno Álvarez; 50 over Dehesa de Valgallego (M) Jorge García; 4 over Coslada (M) Francisco Cortés; 16, 43, 20 over Madrid, Dave Powell, Marce Martín, Patricia Orejas; 2 over Fuenlabrada (M) Félix Arribas; 33 over Rivas Vaciamadrid (M) Blás Molina; 3 over Sureste natural park, Velilla de San Antonio (M) Antonio Espín; 100 over Aranjuez (M) Diego Martínez; 4 at Chica lagoon, Villafranca (TO) Sergio O. Pinedo; 80 over Cervera del Río Alhama (LR) Clara Álvarez; 180 over Autol (LR) José R. Martínez; 5 in rice fields at Arguedas (NA) Clara Álvarez; 16 over Donostia/San Sebastián (G) Joseba Amenabar; 3 over Cadí-Moixerí (LL) Quim Minoves; 89 over Chica lagoon, Villafranca (TO) Mª Carmen Comendador; 67+103 over Colmenar Viejo (M Sol Senise; 1,048 at Gargaligas reservoir (BA) José L. Machuca, Mª José M Cenamor; 8 at Molano pond, Arroyo de la Luz (CC) Francis Martín; 18 over Béjar (SA) A. Vercejo; 9 at El Raso lagoon (VA) Samuel de la Calle; 64 at Atapuerca lagoon (BU) Pedro Arratibel; 18 over Gragera (SG) Chemi Ibáñez; 180 over Barbilla (SG) Antonio Fernández; 300 over Pedraza (SG) Paula González; 30 over Ribarredonda (GU) Rodri G. Vegas; 164 in rice fields at Navalvillar de Pela (BA) Ángel López; 60+25 over Jirueque (GU) Vicente A. Peinado (DALMA); 210+200 in several flocks over Sacedón (GU) Javi Rejos (DALMA); 120 over Huetos (GU) Fernando Canalejas (DALMA); 20 over Lastrilla (SG) José A. Campos; heard at Collado Mediano (M) Adolfo Rodríguez (GOEP); 46+36 over Talavera de la Reina (TO) Antonio Alía, Manuel Gallardo (ARDEIDAS); 203 at Santa Teresa reservoir (SA) Vicente G. Garrudo; 180 over Calatañazor (SO) Virginia Marco; 120 over Alconaba (SO) María Durán; 50 over Gomara (SO) Clara Álvarez; 55 at Monteagudo de las Vicarías reservoir (SO) Fernando Chaugaceda; 13 over Pueblanueva (TO) Pedro Vázquez; 64 at Peraleda de la Mata (CC) and 42 at Valdecañas reservoir (CC) Javier Prieta; 70 over Cambrillos de Guadarrama (TO) Javier Nicolau; 18 over Corral de Calatrava (CR) Francisco Hernández; 1 at El Vicario reservoir (CR) Ángel Coello, Francisco Hidalgo; 71 over La Paramera (AV) José Mª García; 300 over Navarredonda de Gredos (AV) Carlos Fernández; 202 at Manjavacas lagoon, Mota del Cuervo (CU) Fran Baena; 11 over Trujillo (CC) Carmen Pérez-Aloe; 39 over Santa Cruz de Yangüas (SO) Eduardo Alfaro; 29 at El Atance reservoir (GU) Sergio Pérez; 2 over Salburua (AR); 30 over Ribarredonda (GU) Rodri G Vegas; 600 over Monte Valonsadero (SO) Juan P. del Álamo; 218 over Azuqueca de Henares (M) Lorenzo Rey; 602 roost at El Hoyo lagoon (AV) Chema García, Mª Cruz González, Arón Blázquez; nocturnal passage at 23:30h over Guadalajara, Jose Mª Gómez (DALMA).

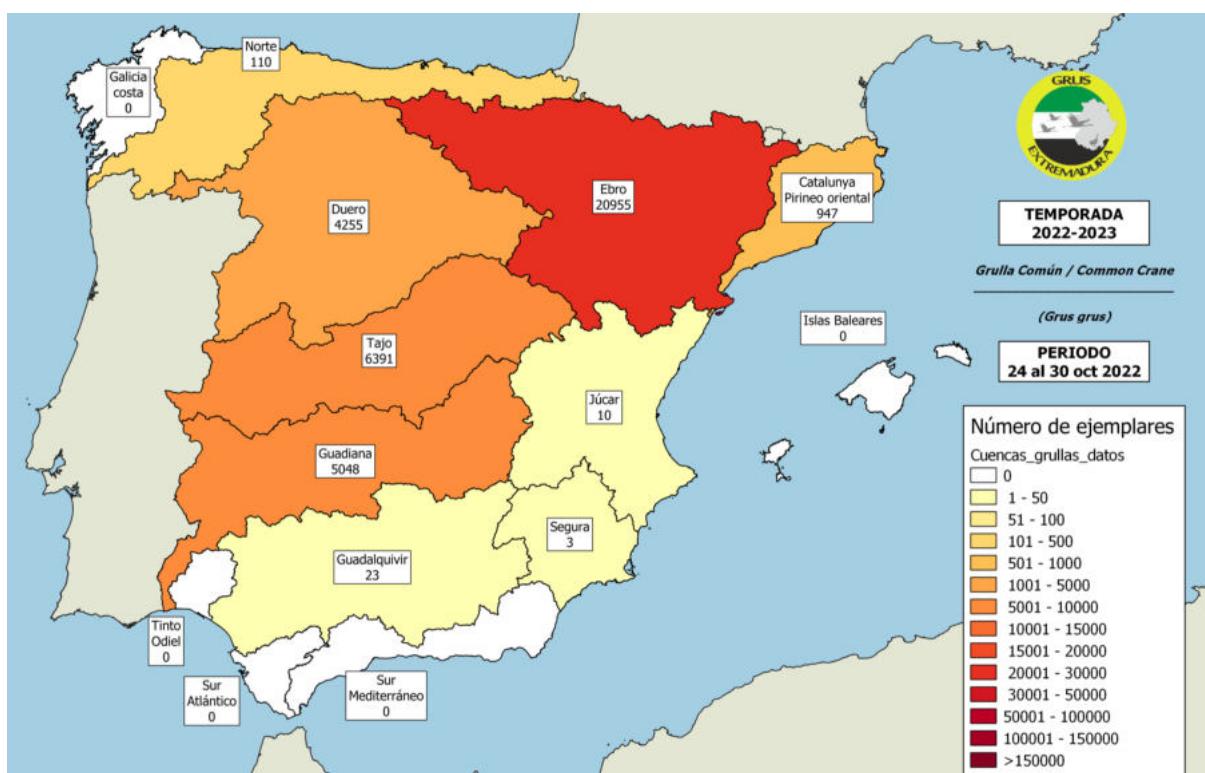
30/10/22: 44 over Villanueva del Pardillo (M) Patricia Alonso; small group over Capdesaso (HU) Eduardo Gracia; 125 over Cebreros (AV) Alfried Sánchez; 40 over Maqueda (TO)

Óscar Frías; 23 over Cordoba, Juanma Sánchez; 10 at Campazo Pond (CC) Neil Renwick; 2 at Guadiato reservoir (CO) Antonio Leiva; 60 over El Tiemblo (AV) Jesús; 60 over Barcelona, Pedro Bescós; around 1,500 set off from Gallocanta lagoon (TE/Z) where around 1,000 remain, Antonio Torrijo; 91 over Alfaro (LR) Andrés de la Torre; 609 in several groups over Sotos de Alfaro (LR) Jorge Ezquerro; 11 over Avenales (SO) Rafa Pinilla; 30 over Madrid; 18 over Rivera de Jarama (M) Blas Molina; 715 at Los Canchales reservoir (BA) and 116 at Torremayor (BA) José A. Román; 24 over Ugena (TO) Chon Conde; 7 over Arenales (SO) Rafa Pinilla; 20 over Villacastín (AV) José A. Campos; 50 over Sacedón (GU) Javi Rejos (DALMA); 250 over Santomera (GU) Ángel Sánchez; 167 over Rincón de Soto (LR) Valentín; 117 over Gallegos de Altamiro (AV) José Mª García; 178 at Obando (BA), 600 at Moheda Alta (BA) and 900 at Valdepalacios, Logrosán (CC) Ángel López ; 7 over Marchamalo (GU) César Paulos (DALMA); 25 over Madrid; 57 over Berzocana (CC) Paul Brugman; 273 over Barásoain (NA) Héctor Díaz; 32 at Sotonera reservoir (HU) Kees Woutersen; several hundreds migrating at night over Isona i Conca Dellà (LL) Samid SC; 18 over Mendixur reservoir (AR); nocturnal passage over Irún (G) José F. Esparcia; 2 over Don Álvaro (BA) Fergus Crystal; 3 over Don Benito (BA) Manuel Rodríguez; 78 over Pago de San Clemente (CC) Martin Kelsey; 15 over Trujillo (CC) Seppo Hjerpe; 10 at Vegaviana (CC) Felipe Rodríguez; 2 over Ávila, Juan Parra; 47 over Burguillos de Toledo (TO) Juan Ruiz; 39 over Yepes (TO) Eva Olivares; 75 over Aranjuez (M) Diego Martínez, Sonia Wandosell; 57 over Carabanchel (M) Marcos Rodríguez; 11 over Almazán (SO) Gregorio Chaugaceda; passage over Soria, Juan P. del Álamo; 3 at Las Cañas reservoir (NA) Javier R. Baños, Javier Robres; 50 over Bertiz natural park (NA) and 15 over Ziga (NA) Manuel Salas; 30 over Mendioroz (NA) Miguel Minondo; 150 at La Zolina reservoir (NA) Alberto Trullos; 60 over Osinaga (NA) Haritz Sarasa; 624 at Loza reservoir (NA) Manuel Fernández; 200 over Pamplona (NA) Patxi Andueza; 4 over Alto de Aibar (NA) Javi Sola, Jon Sola; 55 over Murillo El Fruto (NA) A. Galache; 7 at Dos Reinos lagoon (NA) Thomas Rickfelder; 5 at Ejea de los Caballeros (Z) Alfredo Sánchez; 83+291 over Alfaro (LR) Óscar Ruiz, Borja Sanz; 10 over El Carrascalejo (BA) Francisco A. Prieto; 32 over the River Magasca (CC) Carmen Pérez-Aloe; 267 in the Rosarito reservoir inlet (AV) David García; 17 over Irati forest (NA) Clara Álvarez; 30 over Valdesaz (GU) Fernando Gómez (DALMA); 50 over Prejano (LR) Miguel García; 2 at Leiva (LR) Ignacio Gámez; 22 over Santa María de Trasierra CO) Guillermo Piñal; 9 at Villarreal (BA) Julián Cabello; 3 over Miajadas (CC) Gloria L.G.; 4 over La Portilla del Tiétar, Monfragüe National Park (CC) Borja de Madariaga; 120 over San Juan lagoon, Chinchón (M) Carlos Talabante; 22 over Collado Villalba (M) Andrés Martínez; 350 roost at El Hoyo lagoon (AV) Arón Blázquez; a flock at nightfall over Sacedón (GU) Javi Rejos (DALMA); small group migrating at 23:30h over Logroño (LR) Eugenio Montelio. 85,000 are censused at Lac du Der (FR) LPO Champagne-Ardenne; 4,254 over Lindus (FR) Sandra Pineda, Gorka Gorospe; 270 over Organbidexka Pass (FR) Paul Capbern et al.



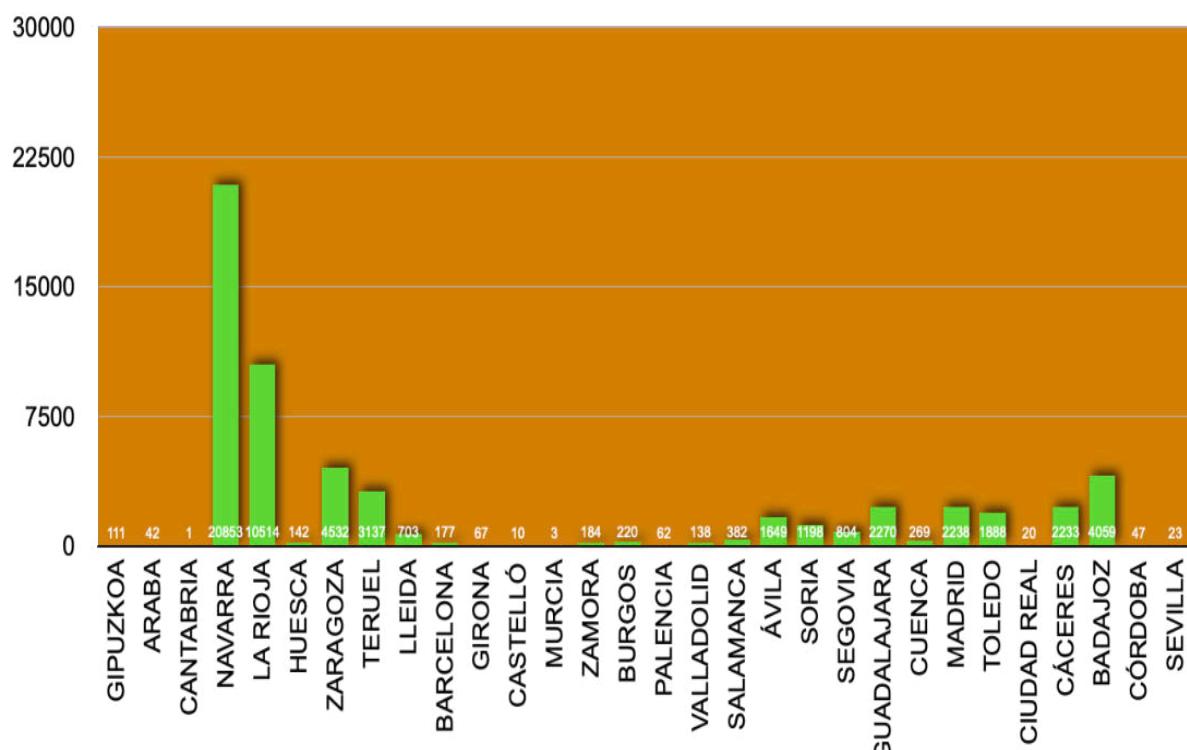


Map nº 11: Migration and distribution by provinces, October 24 to 30



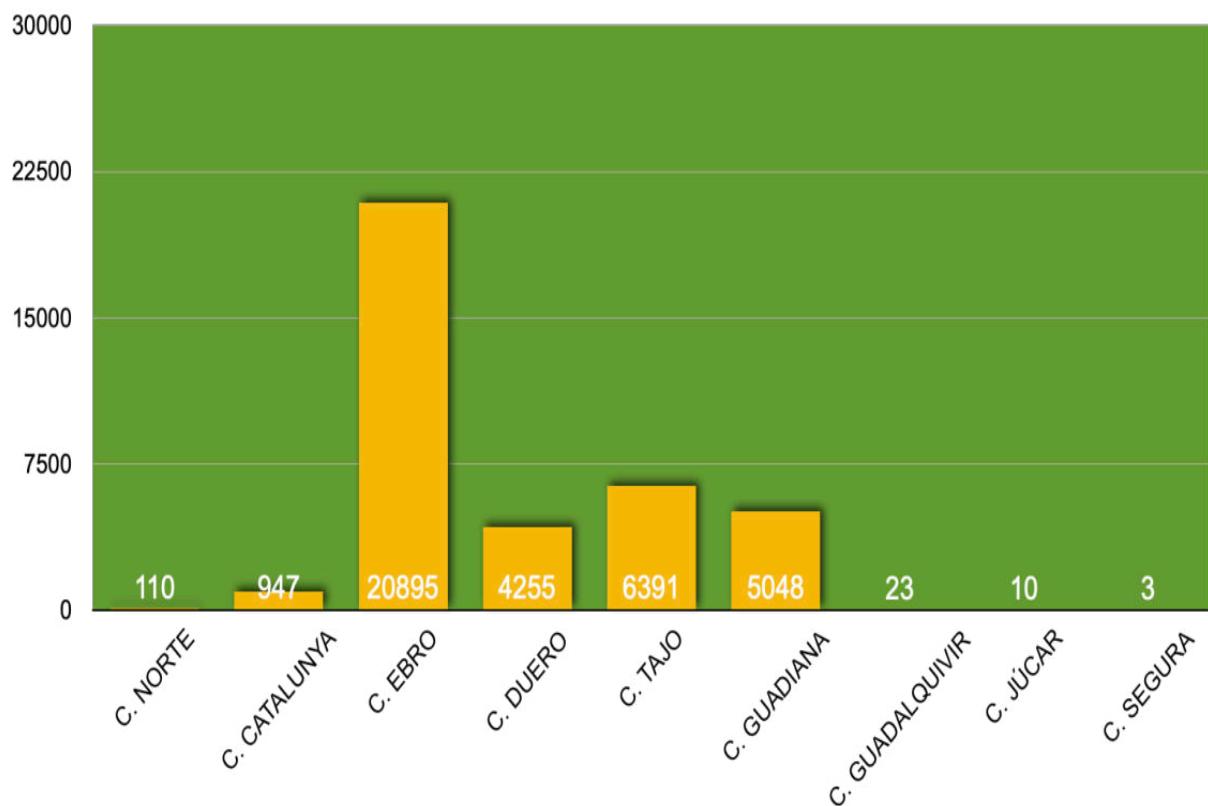
Map nº 12: Migration and distribution by catchment areas, October 24 to 30

Week of October 24th to 30th



Graphic nº 5: Migration by provinces October 24 to 30

Week of October 24th to 30th



Graphic nº 6: Migration by catchment areas, October 24 to 30

Migration continues actively every day of the week, with birds steadily entering the Peninsula.

31/10/22: 72 over Ventas de Urriza (NA) Diego Zalbidea; 500 over Ziga (NA) Manolo Salas; 4 at Fuente de Piedra (MA) Manuel Díaz; 13 over Leiva (LR) José I. Sáenz; 100 over Cabanillas del Campo (GU) José L. Arias, Luis Miguel (DALMA); 40 over Jirueque (GU) Vicente A. Peinado (DALMA); 30 over Las Cañas, Viana (NA) Álvaro Sarrimián; 200 over Donostia/S. Sebastián (G) Carlos Monzón; 228 over Irún (G) José F. Esparcia; 1,316+140 over Txingudi (G) José F. Esparcia, Nerea Ixmukane; 10 over Herriondo (G) Aitor Labandibar; 43 over Hernani (G) Julen Vega, Oihan Makazaga; 84 over Aia (G) Héctor González; 2 over Urdaibai (BI) Urdaibai Bird Center; 235 over Oskotz (NA) Sabi Urmeneta; 17 at Loza reservoir (NA) Cuevas Ruiz; 160 over Morata de Jalón (Z) Andyb Raler; 60 over Alto Tajo natural park (GU) Luna Redondo; 13 over Entrepeñas reservoir, Sacedón (GU) Pedro Bustamante; 13 over Madrid, José Miranda; 6 over El Campillo lagoon (M) Ian Martín; 112 over Soto de las Juntas (M) Daniel Gonzalo, Ian Martín; 52 over Santa Olalla (TO) Fernando E. Navarrete; 113 over Marchamalo (GU) César Paulos; group over Cabanillas del Campo (GU) Fernando Gómez; 2 over Conquista del Guadiana (BA) Antonio Mª Sánchez; 40 over Alcuescar (CC) Francisco Lopo; 7 at Palacio Quemado, Almendralejo (BA) Pepe Elías; 1 over Romángordo (CC) Fernando E. Navarro; 10 over Casarrubios del Monte (TO) Félix Arribas; 12 over Leganés (M) José Moreda; 22 over Madrid, Marcos Rodríguez; 92 over Gragera (SG) Fernando Ávila; 48 over La Pedriza (SG) Antonio Fernández; 29 over Boecillo (VA) Daniel Saldaña; 5 over Atapuerca lagoon (BU) César Diez; 35 over Monterrubio (SG) Humberto; 17 over Echarri-Aranaz (NA) Íñigo Mazkiaran; 90 over Toledo, Alfonso Fernández (ARDEIDAS); 260 in Tablas de Daimiel National Park (CR) Disney Appels; 1 at Cuerda del Pozo reservoir (SO) Juan P. del Álamo, Juan L. Hernández; 7 over Peña del Águila reservoir (BA) Antonio Nieto.

14,620 over Marburg (DE) Martín Kraft



Image nº 11: Crane in Santoña marsh (CT). Photo: Juan M. Pérez

01/11/22: 3 at La Janda lagoon (CA) Andrés de la Cruz; nocturnal passage at 03:00h over Málaga's coast, Miguel A. Martín; 28 over Madrid, José M^a Ruiz; 20 set off from Las Cañas reservoir (NA) Óscar Gutiérrez; 80 over Arnedo (LR) José A. Bermejo; 350 over Sotos de Alfaro (LR) where 85 are settled, Joserra Martínez; 1,105 cross the Pyrenees near Arike (NA) José M^a Ruiz; 43+30 over Alfaro (LR) Juan P. Malumbres; 13 over Las Cañas, Viana (NA) Óscar Gutiérrez; 35 over Alfaro (LR) Cristina Martínez, Juan C. Lorenzo; 39 over Toledo, Ángel Velasco; 60 over Somport (HU) Sebas; 27 over Santa Teresa reservoir (SA) Vicente G. Garrido; heard at Sacedón (GU) Javi Rejos (DALMA); 25 over Sacedón (GU) Juan M. Nuevo (DALMA); 40 over Cabanillas del Campo (GU) José L. Arias (DALMA); 50 over Aldeanueva de Atienza (GU) Mario (DALMA); 90 over Leganiel (CU) Tatiana; 11 over Pelegrina (GU) Carlos Arroyo; 16 over Proserpina, Mérida (BA) Elvira del Viejo; 81 over Pelegrina (GU) Carlos Arroyo; 35+35 over Calahorra (LR) Juan C. Lorenzo; Cristina Martínez; 1 over Cantimpalos (SG) Miguel A. García; 39 over Toledo, Ángel Velasco; 11 at El Campazo pond (CC) Neil Renwick; 12 at Camino de Villafranca lagoon (CR) Alba Becerra, Pedro Bustamante; 100 at Manjavacas lagoon (CU) J.G.; 5 over San Martín de la Vega (M) José M^a Herranz; 70 over Cabañas de Ebro (Z) Jorge Franco; 2,160 over Murillo el Fruto (NA) A. Galache; 800 over Las Bardenas Reales (NA) Clara Álvarez; 100 over Laquidáin (NA) Haritz Sarasa; 40+600 at La Zolina reservoir (NA) Íñigo Petri, Manuel Fernández; 52 over Pamplona (NA) Sandra Pineda, Gorka Gorospe; 200 over Erro (NA) María Durán; 247 over Arizcun (NA) José L. Lizarza; 173 over Arrasate (G) Julen Santa Cristina; 5 over Roncal (NA) José M. Sánchez; 200 over Arbaiun gorge (NA) José M. Sánchez; 475 over Egües (NA) Ángel Larumbe; 9 south of Huesca, Antonio Sanz; 29 over Ávila, Juan R. Cuervo, Jorge Leonor; 320 at El Hoyo lagoon (AV) Víctor Coello; 225 in Villafáfila nature reserve (ZA) José J. Orduña; 18 over Zamora, Alfonso Rodrigo; 35+100 over Alfaro (LR) Cristina Martínez, Miguel Martínez; 50 over San Román (LR) Irene Pinto; 35 over Autol (LR) Alberto Castillo; 250 over Galilea (LR) Pedro Sáenz; 41 over Leganés (M) Alfredo Mirat; 27 over Castañar de Ibor (CC) Joaquín Mazón; 31 at La Janda (CA) Arkadiusz Broniarek, Andrés de la Cruz; 15 at Valdesequera (BA) Atanasio Fernández; 20 over Logroño (LR) José Aº León; 45 over Ventas Blancas (LR) Álvaro Sarramián; 40 over Toledo, Ángel Velasco; 40 over Guadalajara, Jesús Alonso; 80+162+145 over Alfaro (LR) Miguel Martínez, Amadeo Ortega, Óscar Ruiz; 140+ in several groups over García de Sola reservoir (BA) José M^a Traverso; 13 roost at Santa Teresa reservoir (SA) Vicente G. Garrido; 4 at Fuente de Piedra lagoon (MA) Walter Van Kerkhoven; 50 over Fuencemillán (GU) Nuria Rodrigo (DALMA); 50 over Guadalajara, Ana (DALMA); 7 over Hoyorredondo (AV) Paco García; 26 at San Clemente (CU) Fran Baena; several thousands arrive at Gallocanta lagoon (Z/TE) Javier Mañas; 27 over Berzocana (CC) Paul Brugman; 1 at La Albuera lagoon (BA) Julián Cabello; 25 at Aldea del Cano (CC) César Quijares; 5 at Valdesalor reservoir (CC) Francis Martín; 3 over Pago de San Clemente (CC) Martín Kelsey; 116 at Alcollarín reservoir (CC) Seppo Hjerpp; 5 over Medellín (BA) Manuela Rodríguez; 26 over Malpartida de Plasencia (CC) José L. Herrero; 200 over Ratascón (Z) Ángel Bereje; 200 over El Pulguer reservoir (NA) Aitor Ormaetxea; 210 over Tudela (NA) Use Soto, Aitor Ormaetxea; 53 over Villafranca de los Caballeros (TO) Luis Manrique; 12 at Villafranca (TO) Julián García; 13 in dehesa at Villafranca (TO) and 50 over the area, Mayte Rodríguez; 11 over the River Almonte (CC) Diane Appels; 5 over San Martín de la Vega (M) Jose M^a Herranz; 16 over La Atalaya (CR) David Pérez; 73 over Saucedilla (CC) and 10 over Casatejada (CC) Marco A. Sánchez; 24 La Rinconada (TO) Juan Gómez; 32 over Totanés (TO) Javier Gómez; 60 over Toledo, Ian Martín; 206 at Mocejón lagoon (TO) Javier Nicolau; 242 at Riolobos weir (SA) Julián García; 290 in Villafáfila nature reserve (ZA) José A. Hernández; 70 over Alejón (Z) Jorge Franco; 330 over Alfaro (LR) Borja Sanz; 64 over La Marina (A) Simon Johnson; 40 at La Nava lagoon (P)

Fernando Jubete Guzón; 120 over Loarre castle (HU) Juan Ortueta; 30 over Monroy (CC); 2 over Casar de Cáceres (CC) Chema Cepeda.



Image nº 12: Roost at Santa Teresa reservoir (SA). Photo: Vicente G. Garrudo.

02/11/22: 100 over Cerezo de Abajo (SG) Maribel Gutiérrez; 5 over Pedrezuela reservoir, Guadalix de la Sierra (M) Mª Esther Muñoz; 60 over Las Rozas (M) Conny; 5 over Badajoz, Joaquín Mazón; 70 over Cabanillas del Campo (GU) José L. Arias; 12 over Don Benito, Encarnación Baez; 200 at La Janda lagoon (CA) Alejandro Onrubia; 29 over Chica lagoon, Villafranca (TO) and 6 on the ground, Mª Carmen Comendador; 5 circling over Cabanillas del Campo (GU) and another 90 over Guadalajara, Fernando Canalejas (DALMA); 2 groups over Carrascosa de Tajo (GU) Jorge Atance (DALMA); 42 over Guadalajara, Javi Calvo (DALMA); 10 circling over Guadalajara, Ana (DALMA); 40 over Proserpina reservoir (BA) Elvira del Viejo; 15 over Hinojosa del Duque (CO) Carmen Mª Ayuso; 66 over Marchamalo (GU) Carlos Paulos (DALMA); 118 in several groups over García de Sola reservoir (BA) José Mª Traverso; 100 over Madrid, José M. Ruiz; 158 over Pamplona (NA) Isabel Mochales; 24 at Santillana reservoir, Manzanares el Real (M) Sofía Moreno; 61 over Bargas (TO) Marco Ansón; 400 at Castrejón reservoir (TO) Javier Nicolau; 44 over Layos (TO) Ángel Rodríguez; 57 over Aranjuez (M) José A. Sánchez; 120 over Titulcia (M) Antonio Mansilla; 260+120 over Aranjuez (M) Diego Martínez; 37 over Velilla de San Antonio (M) Chemi Ibáñez; 60+12+50 over Guadalajara, Sergio López; 80 over Azuqueca de Henares (GU) Lorenzo Rodríguez; 13 over Paracuellos del Jarama (M) Miguel Arribas; 45 over Leganés (M) Jesús Mayoral; 67+73 over Las Rozas (M) Javi Rubio; 40 over Pozuelo de Alarcón (M) Raúl Marín; 8 over Madrid, Christophe Pontegnie; 200 over El Retiro park (M) Trevor Cromptipon; 8+33 over Madrid, Matt Boardman, Ana Sáez; 50 over Redueña (M) Jorge Lagranja, Javier Hernández; 55 over Monteagudo (NA) Gorka Gorospe; 105 at La Mueda reservoir (NA) Jesús M. Lekuona; 50 over Logroño (LR) Antonio; 75 over Navalvillar de Pela (BA) Ángel López; 37 over El Carrascalajejo (BA) Agapito J. Verde; 40 over Madrid; 74 over Guadalajara, Juan J. Calvo (DALMA); heard at night over Sacedón (GU) Aurora; 300 over Sigüenza (GU) Marisa Gil; nocturnal passage over Cantalejas (GU) Joaquín (DALMA); 8 in El Brazo del Este (SE) Vicent Esteller; 280 over Esteras de Medinaceli (SO) Marián Ramos; 80 over Meco (M) Lorenzo Fernández; 20 over Boecillo (VA) Carlos González; 24 at Boada de Campos lagoon (P) Alejandro Sanz; 50 over Sigüenza (GU) Diego Moreno; 16 at Guiaguerrero lagoon (TE) Gonzalo Peña; 9 at La Loteta reservoir (Z)

Diego Uche; 25 over Huesca, Miguel Vallespir; 70+47 over Soria, Juan P. del Álamo, Juan L. Hernández; 9 over Nalda (LR) José Ochagavía; 34 over Illescas (TO) Leandro Andrada, Andrea Conde; 30 over Ugena (TO) Sagrario Ballesteros.

03/11/22: 40 over Dehesón del Encinar, Torrico (TO) Alberto Herrero; 82 over Retuerta del Bullaque (CR) Gerardo García; 4 over Barcarrota (BA) José A. Fernández; 4 over Badajoz, Joaquín Mazón; 55 over Logroño (LR) José Carlos; 470+90 over Sotos de Alfaro (LR) where 11 are settled Jesús Ucha; 46 over Leganés (M) Mariano Gallego; 16 over Talavera de la Reina (TO) Luis Asuar, José A. Román; 50 over Yunquera de Henares (GU) Javi Alonso; 56 in Los Pedroches dehesas (CO) Carmen Mª Ayuso; 481 at El Hoyo lagoon (AV) José Mª García; 65 over Lascellas (HU) Jasper Lamers; 40 over Quer (GU) Rubén Ramos; 4 over Belorado (BU) César Diez; 3 over Atapuerca (BU) José Mª Ayuela, Fede Sancho; 71 at Urdaibai (B) Charles Cepeda UBC; heard at Lasarte-Oria (G) José R. Labrador; passage over Irún (G) José F. Esparcia; 320 in Txingudi marshes (G) José F. Esparcia; 30 over Salburua (AR) EBB; 12 in S'Albufera natural park, Muro (IB) Pere Vicens; 37 at Fuente de Piedra lagoon (MA) Francisco Pineda, Juan Rodríguez; 2 over Lagartera (TO) César Clemente; 60 over Aranjuez (M) Diego Martínez; 41 over Sureste natural park (M) Javier García; 48 over Toledo, where they are also heard at night, Joaquín Martín; 30 at Pitillas lagoon (NA) Javier Cots; 39 over Falces (NA) Jesús M. Lekuona; 43 over Sotos de Alfaro (LR); 25 over Aia (G) Héctor González; 372 around Navalvillar de Pela (BA) Ángel López; 9,419 are censused at Gallocanta lagoon (TE/Z) S.A.R.G.A.; 130 at Sotonera reservoir (HU) Kees Woutersen; 35 at Talayuela (CC) Ángel L. Méndez; 65 circling at Guadalajara, Nuria Rodrigo (DALMA); 23 over Alfaro (LR) Gerardo A. Sesma; 90 over Griñón (M) Mª Victoria Cabañas; 21 over Esteras de Medinaceli (SO) Marián Ramos; 4 over the River Magasca (CC) Seppo Hjerpe; 35 at Junta de los Ríos (CR) Pedro Bustamante.

7,138 are censused at Arjuzanx (FR) Sophie Laugareil et al

04/11/22: 200 over Cabeza del Buey (BA) Juan J. Ruiz; departures start at 09:41h from Gallocanta lagoon (TE/Z) Cristina Franco, Antonio Torrijo; 330 over Odón (Z) Francisco J. Sampietro; 25 over Toledo, Ángel Velasco; 15 over Miajadas (CC) María García; 3 over Movera (Z) José L. Rivas; 4 over Talavera de la Reina (TO) David Gómez (ARDEIDAS); 5 over Torremayor (BA) Francisco Lopo; 28 over Toledo, Ángel Velasco; 168 over Ejea de los Caballeros (Z) María Berna; 45 over Santa Amalia (BA) Fernando Yuste; 10 over Madrid, Juan C. Rubio; 70 over Ejea de los Caballeros (Z) Javier López; 17 over Aldeanueva de Atienza (GU) Mario (DALMA); 86 over Alcolea de Tajo (TO) Álvaro Antón; 30 over Córdoba, Robie Bouchon; 3 over Oliva de Plasencia (CC), 18 at La Jarilla (CC), 31 over Oliva de Plasencia (CC) Álvaro García; 50 over San Martín de la Vega (M) Guillermo Gómez; 36 over El Campillo lagoon (M) Ian Martín; 40 over Majadahonda (M) Ricardo Fernández; 70 at Boada de Campos lagoon (P) Jorge Peláez; 40 at La Nava lagoon (P) Francisco J. Calvo; 330+44 over Zaragoza, Enrique Pelayo, Alfredo Sánchez; 43 at El Cañizar lagoon (TE) Miguel A. Prado; 61+18 over Leganés (M) Alfredo Mirat; 3 over Ávila, José Mª García; 850 around Navalvillar de Pela (BA) Ángel López; 130 at Santa Teresa reservoir (SA) Vicente G. Garrudo; 10 over Ugena (TO) Carmen Conde; 100 at Alange reservoir (BA) Francisco Lopo; heard at Aranda de Duero (BU) Víctor Salvador; 50 over El Pardo woods (M) Paco Torralba; 4 over Valdebebas (M) Jesús Ruiz; 40 over San Martín de la Vega (M) Fuillermo García; 26 over Bargas (TO) Ángel Cano; passage over Alía (CC) Jorge Ángel; 260 over El Carrascalejo (BA) Francisco A. Prieto; 4 at Casas de Pila, Llerena (BA) Elena Va; 85 at La Janda (CA) Juan Rodríguez; 202 in Villafáfila nature reserve (ZA) Kiko Junco, Manuel Rodríguez; Fernando Jubete Guzón, Carlos Villaverde; Alfonso Rodrigo; 55 over Daroca (Z) Gonzalo Peña; 12 over the air base at Torrejón de Ardoz (M) David Araque; 45 over Mérida (BA) José Leal; 74 over the Muñó valley (BU) Mariano Gutiérrez; 59 over Salburua (AR)

EBB; 100 over Meco (M) José Gallego; 3,804 roost at Borbollón reservoir (CC) Miguel Todón.



Image nº 13: Crane going to roost at Borbollón reservoir (CC). Photo: Miguel Todón.

05/11/22: 16 over Capdesaso (HU) Eduardo Gracia; 24 over Samper de Calamocha (TE) Fernando Aguerro; 30 over Madrid, Daniel Merino; 62 over Villalba de los Barros (BA) Jose Leal; 22 over Vinarós (CS) Manuel; 28 at Corral-Rubio (AB) José Mira; 1 at Torreblanca (CS) Miguel Tirado; 6,000 leave Gallocanta lagoon (TE/Z) Antonio Torrijo; 107 over Villanueva de Sigena (HU) Ricardo Perez; 9 over Bujaraloz (Z) Conchi Esteban; 1,953 in several flocks over Villar del Infantado (CU) Ángel Arellano; 80+150 circling over Villanueva de Alcorón (GU) Javi Rejos (DALMA); 95 at Arguedas (NA) Daniel Velasco; 10 over Mérida (BA) Gerardo Pizarro; 19 over Valdemingómez (M) Vicente López; 60 over Villanueva de Alcorón (GU) Javi Rejos (DALMA); 40 over Santa Eulalia (HU) Francisco Quesada; 15 over Yunquera de Henares (GU) Isabel, Fernando (DALMA); 73 over Guadalajara, Jesús M^a Serrano (DALMA); 10 over Calera y Chozas (TO) Adrián Illescas (ARDEIDAS); 16 over Toledo, Joaquín; 50 in Rosarito dehesas (AV) Dave Langlois; 70 over Cabanillas del Campo (GU) Fernando Canalejas; 3 over Guijuelo (SA) Bregt Desmet; 20 over Montejo (SA) Klaas Vledder; 185 at La Janda (CA) Steve Hutchinson; 256 at Los Canchales reservoir (BA) César Quijada; 97 over Torralba de Oropesa (TO) and 20 at Oropesa (TO) César Clemente; 50 over the River Zapatón (BA) José L. Vinagre; 75 over Leganés (M) Alfredo Mirat; 70+20 over Ugena (TO) Conchita Torres, Carmen Conde, Chon Conde; 320 in several flocks over Toledo, Samuel Sánchez; 34 over Robledo del Mazo (TO) Miguel A. de la Cruz (ARDEIDAS); 60 over Serranillos beach, Talavera de la Reina (TO) Concepción de las Vecillas (ARDEIDAS); 64 over the River Alberche, Cazalegas (TO) José L. de la Cruz (ARDEIDAS); 100 over Talavera de la Reina (TO) Juan J. Alarcia (ARDEIDAS); 27 over Cabañuelas, Talavera de la Reina (TO) José L. Miranda (ARDEIDAS); 200 over Alfaro (LR) Amadeo Ortega; 230 over Higuera de Dueñas (AV) Octavio Infantes; 240 over Mascaraque (TO) David Wood; 95 over Olías de Rey (TO) Ángel García; 149 over Tembleque (TO) Óscar Frías; 50 at La Veguilla lagoon (CR) and 49 at Camino de Villafranca lagoon (CR) Sonia Wandosell, Diego Martínez; 90 over Aranjuez (M) José A. Sánchez; 291 over the Alcarria de Alcalá plains (GU) Jorge Díaz; 65 over Valdebebas (M) David Guillén; 11+39 over El Pardo

(M) Pablo Linage, Luis M. Pérez; 52+45 over Madrid, Jonathan Dadds, Rafa Al; 33 over El Retiro (M) Paco Chiclana; 52 over Vallecas (M) Rafa Al; 62 over Rivas Vaciamadrid (M) Blas Molina; 40 over Daganzo de Arriba (M) Jorge Díaz; 5 at La Pedrezuela reservoir (M) Robert Wilson; 50 over Buitrago de Lozoya (M) Daniel Sáenz; 75 at Santa Teresa reservoir (SA); 7 over Guisando (AV) Luis Miguel; 13 over Zaragoza, Enrique Pelayo; 300 at La Loteta reservoir (Z) Alfredo Sánchez, Esther Charles; 133 over Herrerías (Z) Esther Charles; 75 at Arguedas (NA) and 3 at Pitillas lagoon (NA) Christophe Pontegnie; 200 over Erro (NA) Carlos Monzón; 30 over Abay (HU) Daniel Barceló; 5 over Santa Fé (GR) Arón Blazquez; 70 in Cabañeros National Park (CR) Silvia Pérez, Cristina Pintor; 73 over Cabanillas del Campo (GU) Jose M^a Gómez; heard at Guadalajara, Isabel & Fernando; 11 over the River Guadiana, Corral de Calatrava (CR) María Córdoba, Francisco Hidalgo; 13 over Corral de Calatrava (CR) Francisco Hidalgo; 100 over Agullana (GI) Pau Federico; 750 at Zarza de Granadilla (CC) Vicente Torres, Javier Prieta; several at Portacolón, Mallorca (IB) Antoni Mateu; 16 at the River Ambroz (CC) and 40 at Las Hojarascas pond, Oliva de Plasencia (CC) Javier Prieta; 70 at La Fresnedilla pond, Oliva de Plasencia (CC) Vicente Torres; 10 over Magán (TO) Francisco Cabrera; 45 at Talayuela (CC) Antonio Méndez, Ángel L. Medina; 17 over Chapinería (M) Pablo Escribano; 101 over Yuncos (TO) Blas Molina; 1 over Los Balbases (BU) Maricruz Gutiérrez; 19 over Santa Marta (BA) Alberto Cansado; 21 at Estany d'Ivars (LL) Jorge López.



Image nº 14: Estonian crane at Villacañas (TO). Photo: Ángel Velasco.

06/11/22: 2,100 roosted in Peña Hueca lagoon, Villacañas (TO) Ángel Velasco; 46 over Marchamalo (GU) Carlos Paulos (DALMA); 55 at the lagoon complex, Pétrola-Corral Rubio (AB) Fernando Rico; 23 over Torre de Miguel Sesmero (BA) José A^a Fernández; 135 in several groups over García de Sola reservoir, Talarrubias (BA) José M^a Traverso; 63 over Sotos de Alfaro (LR) and 52 over Cofín, Alfaro (LR) Lidia Roncero, Ignacio Gámez; migration began at 10:25h at Gallocanta lagoon (TE/Z) Antonio Torrijo; 75 circling at Jarandilla de la Vera (CC) Sofía Moreno; 95 over Orea (GU) Carlos Rustarazo, Jacinto Rustarazo, Gabriel Rustarazo, José L. Muñoz, Esther Yera; 82 over Ayuda bridge (BA/POR) Julián Cendrero; 2 over Peñaflor de Gállego (Z) María Berna; 25 over Toledo, Ángel Velasco; 76 at Manjavacas lagoon (CU) Jesús Porrero; 10 over Almendralejo (BA) Antonio M^a Sánchez, Francisco Macias; 100 at La Nava lagoon (P); 16 over Colmenar Viejo (M) and 4 at Santillana reservoir (M) José Fernández; 67 at Toril (CC) Bregt Desmet; 45 over Berzocana (CC) Paul Brugman; 2 over Monfragüe National Park (CC) Bregt Desmet; 16 over Villanueva de la Serena (BA)

Alicia Casillas; 19 over Colmenar Viejo (M) Sol Senise; 59 at Navalcán reservoir (TO) José L. de la Cruz (ARDEIDAS); 27 over Cervera de los Montes (TO) David Gómez (TO); 133 at the lagoon complex, Alcázar de San Juan (CR) Francisco Morata; 10 over Mollet del Vallés (B) Elena Farré; 14 over the River Gévora (BA) Gerardo Pizarro; 17 at Dehesón del Roble, Pueblonuevo de Miramontes (CC) César Clemente; 9 over Campillo lagoon (M) Patricia Rodríguez; 12 over El Pardo woods (M) Pedros Martinian; 21 over Mingorrubio (M) Félix Aguado; 16 over Madrid, Mónica Carrasco; 50 over Daganzo de Arriba (GU) and 62 over Meco lagoon (M) Jorge Díaz; 2 over Zaragoza, Alfredo Sánchez; 15 in Salobrar natural park, Mallorca (IB) Fátima Guido, Josep Manchado; 43 over Olite (NA) Asier Cáceres; 15 at Dos Reinos lagoon (NA) David Miqueleiz; 154 over Lumbier gorge (NA) Teresa Subiza; 23 over Orreaga (NA) Gorka Gorospe; 200 over Erro (NA) Carlos Monzón; 70 over Ugena (TO) Carmen Conde; 321 roost at Sotonera reservoir (HU) Silvia Duque, Francisco Quesada; 176 over Sariñena lagoon (HU) Eduardo Gracia; 57 roost at Alqueva reservoir (BA) Mariano Cabrero; 20 going to Navalcán reservoir (TO) José L. de la Cruz (ARDEIDAS); 250 in Los Pedroches dehesas (CO) Juanma Sánchez; 611 roost at El Hoyo lagoon (AV) Arón Blázquez; 60 over Guadalajara, Fernando Gómez (DALMA); 94 at Navalespino reservoir (CO) Miguel Corvillo; 120 over El Carrascalejo (BA) Agapito J. Verde; 5 over Santa Quiteria (CR) Cristina Pintor; 1,502 at Alange reservoir (BA) Raúl Granados; 20 over Altos de Bargas (TO) and 24 over Cabañas de la Sagra (TO) Pepe Buendía; 49 over La Revierta stream (M) Mark Davis; 15 over Majadahonda (M) Susana Felipe; 65+25+45+45+8 over Valdebebas (M) Beatriz Bermejo Javier Paricio, Juanma Santana, Carlos Culebras, Borja de Madariaga; 15 over Buendía reservoir (CU) Fernando Alonso; 16 over Quintanilla del Agua (BU) Israel Yáñez; 12+90 over Irati forest (NA) Cristophe Pontegnie, Ana Tejeiro; 50 over Orbaiceta (NA) Patricia Andrés; 70 over Aurizberri (NA) Carlos Monzón; 83 at La Zolina reservoir (NA) Julen Santa Cristina; 10 over Llicà d'Amunt (B) Ana Santander; 336 over Mirandilla (BA) José M^a Benítez.

68,750 are censused at Lac du Der (FR) Louis Parisiel, LPO Champagne-Ardenne; 41,850 migrating over Marburg (GE) Martín Kraft.

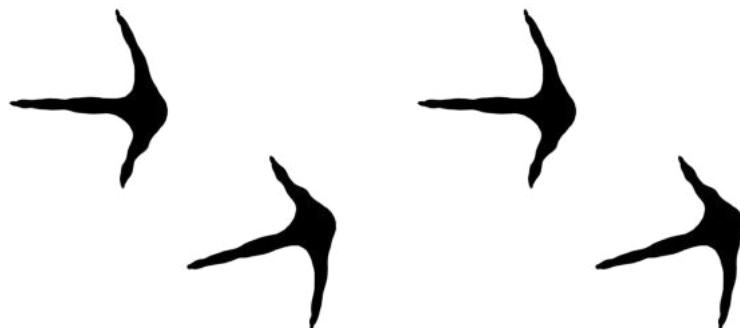
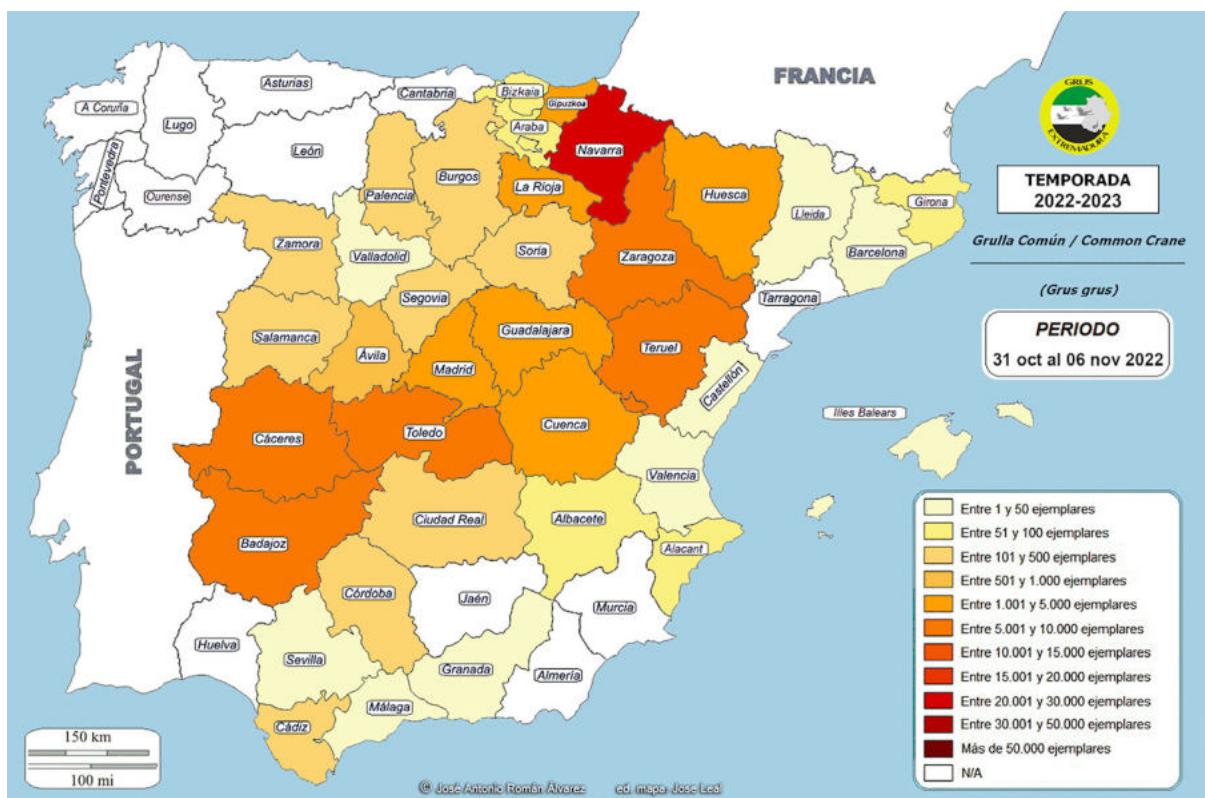




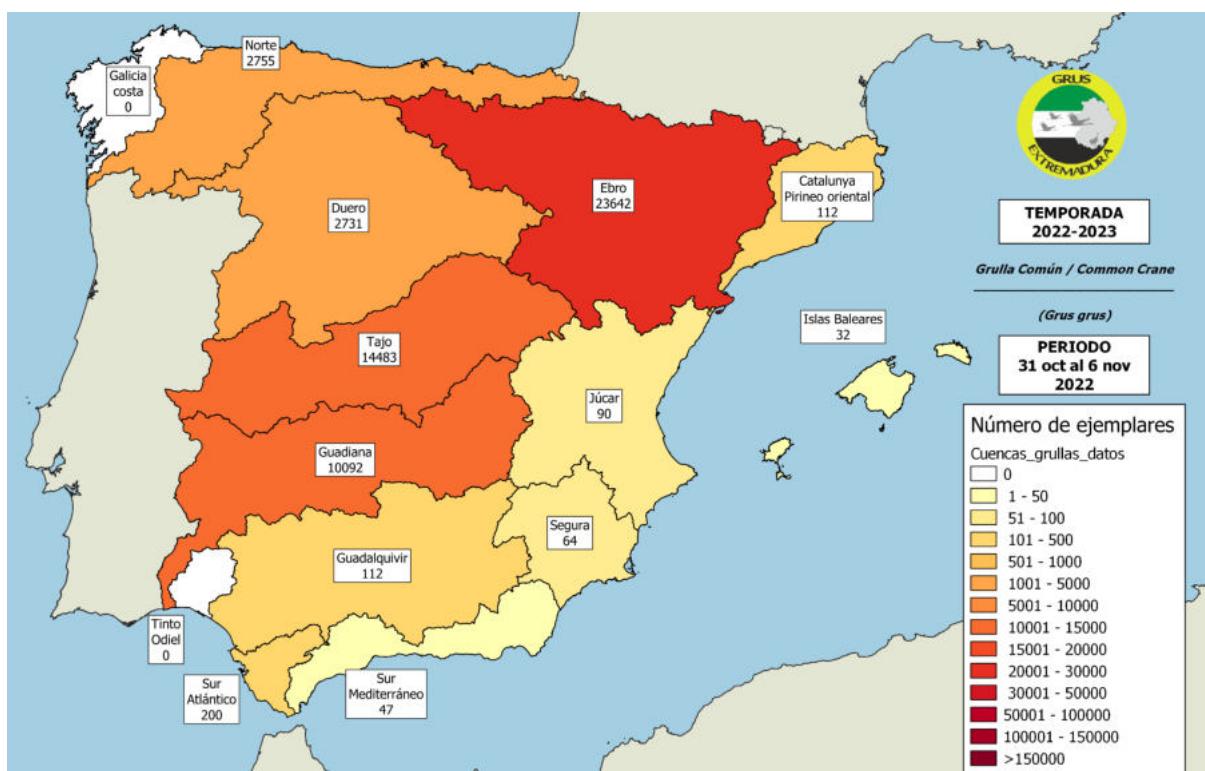
Image nº 15: Cranes at Santillana reservoir (M). Photo: José Fernández.



Image nº 16: Group of cranes at the lagoon complex, Corral-Rubio/Pétrola (AB). Photo: Fernando Rico.

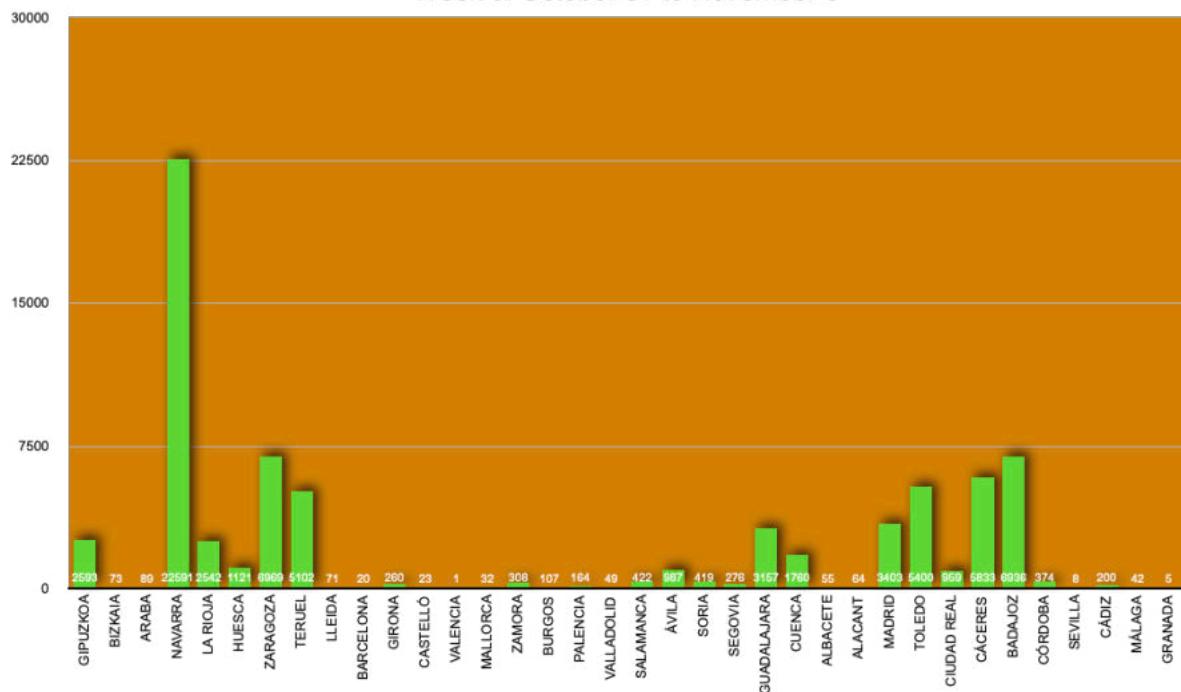


Map nº 13: Migration and provincial distribution between 31 October and 6 November.



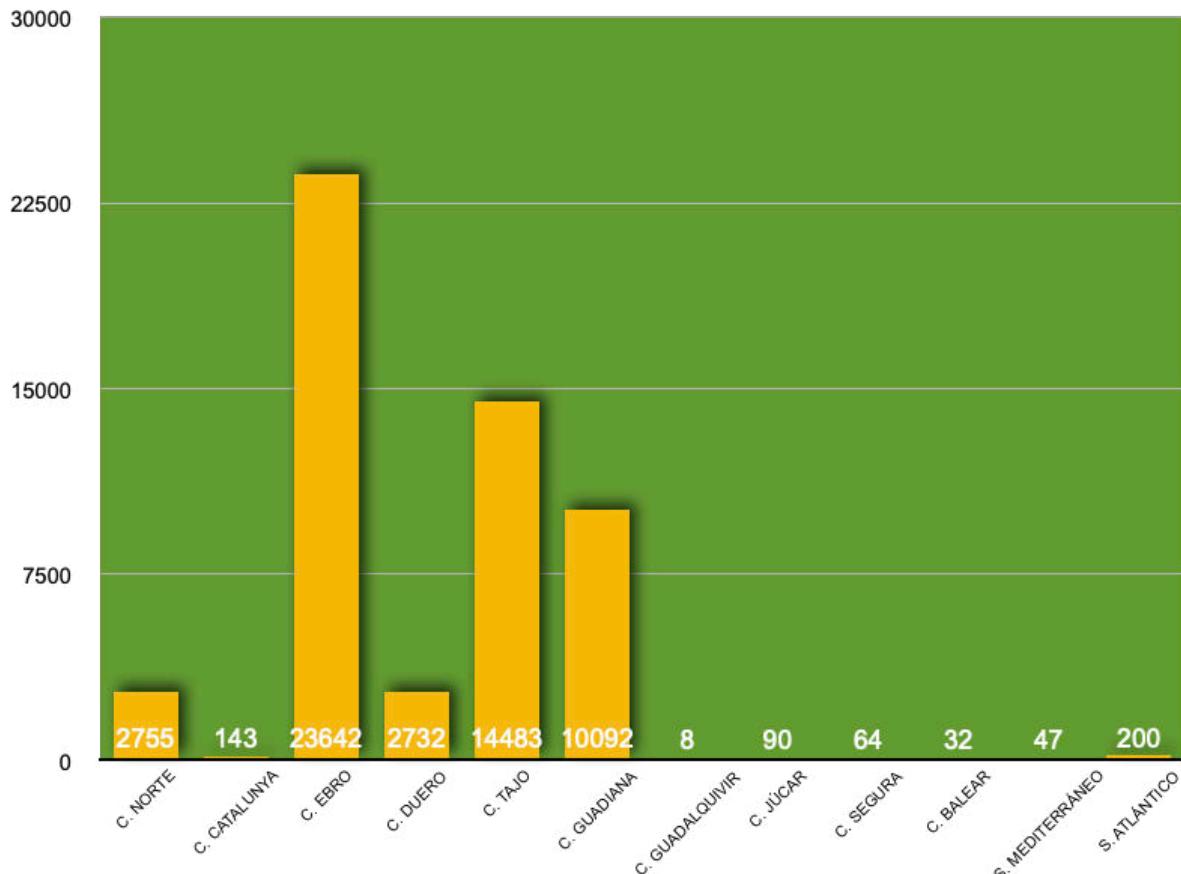
Map nº 14: Migration and distribution by water catchment areas between 31 October and 6 November

Week of October 31 to November 6



Graphic nº 7: Migration by provinces October 31 to November 6

Week of October 31 to November 6



Graphic nº 8: Migration by catchment areas, October to November 6

The week began with light migration, but at the end of it there was a significant entry of birds into the Peninsula, principally through The Basque Country and Navarra, as well as major movements from Germany and France.

07/11/22: 27 over Sotos de Alfaro (LR) Marta Sendra; 8 at Ojos Negros (TE) Antonio Torrijo; 42 over Sotos de Alfaro (LR) Jesús Ucha; 9 over Mallén (Z) Esther Charles; 72 over Villalba de los Barros (BA) Jose Leal, Juan G. Miranda; 26 over Mérida (BA) Juan A. López; 30 over Ugena (TO) Luis Conde; 4 over Trujillanos (BA) Antonio M^a Sánchez; 7 over Cerdanyola del Vallès (B) Enric Ortega; 280 at La Janda (CA) Eduardo Realinho; 129 at Riolobos weir (SA) Antonio Ceballos; 8 over Paracuellos del Jarama (M) Elena Baonza; 11 at Becerril lagoon (TE) Pablo Moya; 20 over Griñón (M) M^a Victoria Cabañas; 28 at Pétrola saline lagoon (AB) Noé Cuesta; 230 over Don Álvaro (BA) Fergus Crystal; 6 at Pedroso de Acim (CC) Francis Martín; 1 over Careses (Z) Noelia Fernández, José M^a S. Román; 306 in Villafáfila nature reserve (ZA) Verónica Sánchez; 900 go to roost at Alcollarín reservoir (CC) Martín Kelsey; 50 roost at Santa Teresa reservoir (SA) Vicente G. Garrudo.

08/11/22: 2,092 roosted at Alange reservoir (BA); 21 at Yelbes (BA), 32 at Santa Amalia (BA), 6 at Hernán Cortés (BA), 38 at Casar de Miajadas (CC), 8 at Puebla de Alcollarín (BA) and 986 roost at Los Canchales reservoir (BA) José A. Román; 20 over Toril (CC) Wannsee T'Joen, Gillis de Tremerie, Bregt Desmet; 16 over Serradilla (CC) Achilles Cools; 19 over Tauste (Z) Esther Charles; 5,000 at Gallocanta lagoon (Z/TE) where small groups continue arriving, Antonio Torrijo; 50 circling at Toledo, Ángel Velasco; 20 over Sástago (Z) José A. Ramos; 44 over El Carrascalejo (BA) Agapito J. Verde; 800 at Manjavacas lagoon (CU) Juan R. Villora, Samuel Aunión; 155 at La Bazagona (CC) Sergio Mayordomo; 1 at Ivars lagoon (LL) Sergi Salas; 200 over Navatrasierra (CC) Joaquín Araujo; 18 over the River Manzanares (M); 80 at La Nava lagoon (P) Daniel Wood; 35 roost at El Cañizar lagoon (TE) Felipe Rosado.

09/11/22: 5 over Badajoz, Juan L. Sardiña; 18 at Bujaraloz (Z) Conchi Esteban; 32 over Ugena (TO) Luis Conde; 2 in Las Vegas de Bureba (BU) Fede Sancho; 205 at Cabeza del Buey (BA) Gillis de Tremerie, Bregt Desmet; 3 at Casar de Cáceres reservoir (CC) David Lindo; 90 over Los Fornazos wetlands (Z) Antonio Torrijo; 6 at Valdabra reservoir (HU) Víctor Pintado; 130 at La Loteta reservoir, Gallur (Z) Antonio Torrijo; 300 at Rosarito reservoir (CC/TO/AV) and 16 at Calera y Chozas (TO) Francisco Parras, José M^a de la Peña; 100 feeding in dehesas at La Roca de la Sierra (BA) Julián Cendrero, José M^a Guzmán; 239 roost at El Hoyo lagoon (AV) José M^a García

10/11/22: 25 over Campanario (BA) M^a Isabel Barquero; 32+36+11 over Pozuelo de Aragón (Z) Esther Charles; 65 over García de Sola reservoir (BA) José M^a García; 1 over the Sierra de Caldereros (GU) Rubén; 5 in the Brazo del Este (SE) Vicent Esteller; 16 at La Alcazabilla (BA) Raúl Pérez; 7 over Valdelacalzada (BA) José L. Bautista; 107 over Montijo (BA) Arturo Pérez; 1,150 over Don Álvaro (BA) Fergus Crystal; 64 over Riudaura (GI) Francisco Sánchez; 200 at Fuente de Piedra lagoon (MA) Manuel Miraben; 310 in Villafáfila nature reserve (ZA) José J. Orduña; 8,900 are censused at Gallocanta lagoon (TE/Z) S.A.R.G.A.; 639 roost at El Hoyo lagoon (AV) Arón Blázquez; passage over Alfaro (LR) at 22:47h, Miguel Martínez.



Image nº 17: Cranes over the River Alagón (CC). Photo: Michel Viskens

11/11/22: Migrating flock over Alfaro (LR) at 01:30h, Miguel Marrinez: group over Toledo Gate (M) at 07:14h, Ángel Arellano; 84 over Majadahonda (M) Conny; 300 at Sotos de Alfaro (CR), where 100 are on the ground, Borja Sanz, Andrés de la Torre; 11+120+50+41+25 over Gallegos de Sobrinos (AV) José M^a García; 56 at Sotonera reservoir (HU) Pablo Vallés; 25+15+37 over Sevilla la Nueva (M) Mara Brans; 31 over Talavera de la Reina (TO) David Gómez (ARDEIDAS); 24 over Grañen (HU) Eduardo Gracia; 30 in dehesas at La Roca de la Sierra (BA), plus 34 at Botoa (BA) Carmen Conde; 35+17 over Guadalajara, Ana, Juan M. Nuevo (DALMA); 80 over Cabanillas del Campo (GU) Luis; 4 over Aldeanueva de Atienza (GU) Mario (DALMA); 34 over El Casar (GU) Fernando Gómez (DALMA); 30 over Jirueque (GU) Vicente A^a Peinado (DALMA); 31 over Cabanillas del Campo (GU) José L. Arias (DALMA); 7 in dehesa at La Aldea del Obispo (CC) Manuel Moro; 88+100 over Pamplona (NA) by the density, several hundred are going over, Diego Zalbidea; 200+67 over Don Benito (BA) Encarnación Baez; 6 over Sariñena lagoon (HU) Eduardo Gracia; 12 over Los Barrios de Bureba (BU) and 2 over Terrazos (BU) Fede Sancho; 39 over Bargas (TO) and 60 over Toledo, Mario Ansón; 43 over Vitoria/Gasteiz (AR) EBB, Agustín Rivas; 8 over Salburua (AR) EBB; 150+123 over Vitoria/Gasteiz (AR) Azaitz Unanue; 1 at Urdaibai (BI) Urdaibai Bird Center (UBC); 109 in Txingudi marshes (G) Nerea Ixmukane, Paul Ortuzar; 80 over Ormaiztegi (G); 40 at Madrigalejo (CC) Xabier Vázquez; 52 over Toledo, Marina Guerrero; 18 over Sureste natural park (M) Luis Albano; 6 over Leganés (M) Ricardo Rodríguez; 27 over Madrid, Christophe Pontegnie; 20+60 over Valdebebas (M) Daniel Gaona, García de los Ríos; group over Fresno de Torote (M) Jennifer Estévez; 100 over Arévalo (AV) Víctor González; 60 at Lomoviejo, Zapardiel (VA) Alejandro Sanz; 4 over Salamanca, Jorge Pérez; 80 at Guarrera lagoon (SO) María Durán; 200+210+100+90+52 over Pamplona (NA) Patxi Andueza, Sandra Pineda, Gorka Gorospe; 100 at La Zolina reservoir (NA) Haritz Sarasa; 8 over Sotos de Alfaro (LR) Sergio Nebot; 442 at Sotonera reservoir (HU) Francisco Quesada; 36 over Navalcarnero (TO) Alberto Herrero (ARDEIDAS);

270 at La Janda lagoon (CA) Arkadiusz Broniarek; 190 over Sotos de Alfaro (LR) Carmen Corchero; 121 over Alsasusa (G); 170 over Colmenar Viejo (M) Pedro Sanz; 459 over Txingudi (G) David Santamaría; 14 over Carpio (VA) Alejandro Sanz; 1,150 roost at Alcollarín reservoir (CC) Neil Renwick; 1,055 roost at El Hoyo lagoon (AV) Jorge Leonor, Víctor Coello, Alfonso Guío, Miguel Martín; 1 over Alfaro (LR) at 21:00h, Andrés de la Torre; 45 over Calatayud (Z) Ángel Gonzalo; 21 in Brazo del Este (SE) Steve Hutchinson; 1 over Legutio (AR) Serafín Alarcón ; 70 over Ordizia (G); 780 over Pamplona (NA) Pilar García; 107 over Cadreta (NA) José M^a de la Peña; 173 over Los Ausines (BU) Rafael Díaz; 1,600 around Colada reservoir, El Viso (CO) Juanma Sánchez; 100 at Navamusio reservoir, Candelario (SA) Fernando Aranguren.



Image nº 18: Cranes feeding in dehesa at Santa Teresa reservoir (SA). Photo: Vicente G. Garrudo

12/11/22: 45 over Olmos de Atapuerca (BU) Fede Sancho; 40 over El Retiro park (M); 45 over Valdebebas (M) and 50 over Fuenlabrada (M) Juan C. Paniagua; 7,204 in several flocks cross over Vitoria/Gasteiz (AR) throughout the morning, Beñat Guevara, Julen Santa Cristina; 30 over Bilbao and 16 over Mungía (BI) José A. Campos; 70 over Villamediana (LR) Álvaro Sarramíán; 70 over Santo Domingo (LR) Óscar Zuazo; 485 go over Sotos de Alfaro (LR) Andrés de la Torre; 14 over Cabanillas del Campo (GU) Fernando Gómez (DALMA); birds leave on migration from Gallocanta lagoon (TE/Z) Carmina Franco; 63 at La Nava lagoon (P) Alejandro Sanz, Fernando Jubete Guzón; heard at Salorino (CC) Antonio Galán; 25 over Villa de Ocón (LR) Sandra Sanz; 184 over Aguilar del Río Alhama (LR) and 58 over Valdemadera (LR) Roberto Vega; 74 over Calera y Chozas (TO) Marco Ansón; 81 over La Val d'en Bas (GI) Joan Cortés; 70 over Olot (GI) David Batlle; 47 between Agoncillo and Requejo (LR) David Ijalde; 20 over Maó, Menorca (IB) Álvaro Díaz; 60 at La Zolina reservoir (NA) and 92 over Aranguren (NA) Juan I. Deán; 12 over Barcelona; nocturnal flight over Guadassuar (V) Biel Miquel; 37 over Barcelona, Gabriel Patinyo; 107 over Caldreta (NA) José M^a de la Peña; 13 over Alzuza (NA) Javier Sanz; 200 over Zizur Mayor (NA) Juan P. Azkoaga; 560 around Loza reservoir (NA) Cuevas Ruíz; 2 Getxo (BI), Carlos García; 8 over Erandio (BI) José R. Moreno; 34 over Mungía (BI) Aitor Urrutia; 14 over Beasain (G) Sergio GM; 37+230 over Urdaibai (BI) Alberto Zubiaurre, UBC; 110 over Orio (G) Alain Britt;

10 over Itxape (G) and 16 over Aia (G) Héctor González; 193 over Lasarte (G) Julen Vega; 63 over Valladolid, Fernando T. Rico; 166 over Simancas (VA) Víctor Salvador; 32 over Moraleja de Matacabras (AV) Víctor Coello; 70 over Abéjar (SO) José Mª Lenguas; 117 over Almazán (SO) Fernando Chaguaceda; 108 at Monteagudo de las Vicarias reservoir (SO) and 22 over Montuenga (SO) Juan P. del Álamo, Jesús Ruíz, Juan L. Hernández; passage over Guadalajara, Paco Peña: 7 over Fresnedilla de la Oliva (M) John L. Muddeiman; 60+71 over Madrid, Daniel Izquierdo, José L. Manzanero; several hundred have gone over the city, Manu Betanzos: 113 over Valchico stream (M) Marcos Rodríguez; 42 over Olías de Rey (TO) Ángel Cano; 12 at La Anguila reservoir (CC) Javier Prieta, Álvaro García; 11 at Casar de Cáceres reservoir (CC) Francis Martín; 14 at Camino de Villafranca lagoon (CR) Gabriel Martín; 71 over El Retiro park (M) Juan C. Paniagua; 180 over Sinlabajos (AV) Víctor Coello; 380 over Arnedo (LR) where there was nocturnal passage and more before dawn, Pepe Bermejo; 850 over Izurzun (NA) Sergio Calvo; 60 circling over Cabanillas del Campo (GU) Paco; 81 over Santpedor (B) Marc Illa; passage over Puigcerdà (GI) Pere Baucells; 980 over Donostia/S. Sebastián (G) Joseba Amenabar, Juan Arizaga; nocturnal passage over Irún (G) and 330 over Txingudi (G) José F. Esparcia; 193 over Lasarte-Orio (G) Olaia Garmendia; 30 over Zumaia (G) Gonzalo Torres; 93 over Lleida, José Guerra; 53 over Arnedo (LR) Belén H; 74+134 over Pamplona (NA) Diego Zalbidea; 300 over Vitoria/Gasteiz in the afternoon, Julen Santa Cristina; 100 over Cantalojas (GU) Joaquín (DALMA); 110 over Castroviejo (LR) Jorge Alonso; 14 over Mirandilla (BA) Mariano Cabrero; 85 over San Lorenzo de Flúmen (HU) Eduardo Gracia; 19 over Guadalajara, Javi Calvo (DALMA); 600 over Donostia/S. Sebastián (G) Carlos Monzón, Roberto Alberdi; 30 over Garaluz (G) Asier Sarasua; 1 circling, which then stayed to roost, at Rambla Morales (AL) David C. Huertas; several hundreds have crossed over Soria province, Juan L. Hernández; 7 over Morenilla (GU) Paula Royo; group over Cabanillas del Campo (GU) at 19.00h, Cristina Ruíz; heard at 20:00h over Guadalajara, Isabel & Fernando; 50 at night over Galilea (LR) Cristina Alonso; 7 over Morenilla (GU) David Almonacid (DALMA); 60 over Murillo de Río Leza (LR) Paula Royo; 500 over Los Agudos (LR) Chema; 30 over Alarilla (GU) and 127 over Cabanillas del Campo (GU) and heard over Guadalajara at 20:00h, José Mª Gómez (DALMA); 165 at Aldea del Cano (CC) and 11 at Santiago del Campo (CC) P. Hovenkamp; 170 over Alfés (LL) Ferrán Pujol; 18 over Ripollet (B) Jordi Salas; 8 over Salburua (AR) EBB; 11 over Legutio (AR) Serafín Alarcón; 68 over Ullíbarri reservoir (AR) Diego Benavides, José L. Gabela; 130 over Miranda de Ebro (BU) Eduardo Alfaro; passage over the River Tirón (BU) and 200 over Juarros (BU) Arturo Fuente; 112 over Las Hoces del Riaza (SG) Elías Gomis; 50 over Ibarra (G) Nerea Ixmukane; 140 over El Raso lagoon (VA) Samuel de la Calle; 121 over Penarrubias de Pirón (SG) Miguel A. García; 70 over Calahorra (LR) Marcos Alguacil; nocturnal passage at 23:00h over Galilea (LR) Cristina Alonso; 50 at night over Autol, Alfaro (LR) Alfonso Cillero; 760 in dehesas, Los Pedroches (CO) Juanma Sánchez; 200 in Benalup countryside (CA) Pedro Barón; 200 at Camino de Villafranca lagoon (CR) and 30 at Llongar lagoon, Lillo (TO); 440 at Riolobos weir (SA) Carlos Villaverde; 30 over Nava de Arévalo (AV) Arón Blázquez, Nayib Hamdou; 104 over Casarrubios del Monte (TO) Unai Fuente; 51+120 over Las Hoces del Riaza (SG) Ana Rojas, María Blázquez; 39 over Burgos, Tim Robinson; 16 over Rioseras (BU) Miguel Pérez; 177 over Atapuerca (BU) Marcos Morondo; 20 over Burgos, Andrés M.; 7 over Calvarrasa de Abajo (SA) Joaquín Salinas; 15 over Valdefuentes de Sangusín (SA) Fernando Aranguren; 2 over Rambla de las Ventanas (A) Toni Mulet.

Massive departure from Lac du Der (FR) Aurelien Deschartres; significant passage over Münster and Melle and thousands over Diepholzer Moorriederung (GE) Johannes Amshoff; 66,982 in 2 hours over Wittem (ND) Bjorn Alards; 26,200 over Lieja (BE) David Kever; 10,624 over Marburg (DE) Martín Kraft; 8,569 over Lindus (FR) Sandra Pineda, Jon Solas.



Image nº 19: Pair of cranes at Getxo (BI). Photo: Carlos García.

13/11/22: 60 over Alfaro (LR) at 00:44h, Eva León; group over Ávila at 02:20h; 120 roosted at Atapuerca lagoon (BU) Fede Sancho; 230 roosted at Peña Hueca lagoon, Villacañas (TO) Ángel Velasco; some 5,000 set off from Gallocanta lagoon (TE/Z) Antonio Torrijo; 22 over Portilla (LR) Asier Ximenitz; 42 over Leiva (LR) José I. Sáenz; 50 over Alfaro (LR) at 08:10h, Óscar Ruiz; 2,000 roosted at Salburua (AR) Julen Santa Cristina; 400 over Cofín (LR) at 08:20h, Borja Sanz; 450+ go up from Undiano reservoir (NA) Juan J. Lavilla; 1,125 go over Santa Teresa reservoir (SA) Vicente G. Garrudo, Vega Bermejo; 29 over Cariñena (Z) Coral Jordán; 17 over Santo Domingo (LR) and 55 over Tormantos (LR) Javier Robres; 45 leave Las Cañas reservoir, Viana (NA) towards Agoncillo (LR) Lidia Roncero; 85 over La Almunia de Doña Godiva (Z) Esther Charles; 350 over Santo Domingo (LR) where there was morning passage, which couldn't be seen because of fog, Óscar R. Zuazo; 34 over Logroño (LR) Álvaro Sarramián; 300 over Autol (LR) Alfonso Cillero; 11+67 over Villamanta (M) Alfredo Mirat; 155 over Majadahonda (M) Conny; 9 over Burgos and 31 over Villaquirán de los Infantes (BU) P. Hovenkamp; 80 over Collado Hermoso (M) Cefe; 85 over Peña Lara (M), 66 over El Retiro park (M) and 150 over Boadilla del Monte (M) Juan C. Paniagua; 40 over Marchamalo (GU) Luis; 20 over Quijorna (M) José M. Ruiz; heard at Roblelacasa (GU) Pilar; 254 over Guadalajara, José L. Arias (DALMA); 50 circling over Guadalajara, Alfredo; 8 over Mirandilla (BA) Mariano Cabrero; 24 feeding at Cotones del Monte (ZA) Ezequiel; 8 over San Juan reservoir (M) Mara Brans; 45 over Cabeza del Buey (BA) Elvira del Viejo; 12 over Mérida (BA) Alfonso López; 75 over La Puebla de Valles (GU) Fernando Canalejas (DALMA); 2 over Yunquera de Henares (GU) Isabel & Fernando; 20 between Torrelodones and Las Rozas (M) Juan P. Fresno; 60 over Pago de S. Clemente (CC) Martín Kelsey; 40 over Alfaro (LR) Andrés de la Torre; 110 over Puebla del Valle (GU) Fernando Canalejas (DALMA); 40 over Arbarcón (GU) Jesús Alonso; 103 between Ruecas and Santa Amalia (BA) Alicia Casillas; 53 beside Zaragoza airport, María Berna; 50+ over Sevilleja de la Jara (TO) Lidia Roncero, Ignacio Gámez; 40 over Calahorra (LR) Jesús Ucha; 26 over Perdiguero (LR) José I. Pérez; 52 over Trevijano (LR) Óscar Guerrero; heard at Sacedón

(GU) Javi Rejos (DALMA); 60 over Terzaga (GU) David Almonacid (DALMA); 191 over Arnedo (LR) Belén H.; 15 over Villamediano (LR) Óscar Gutiérrez; 16 over La Alfranca (Z) José L. Rivas; passage over Mount Abantos (M) although fog makes viewing difficult, José M^a García; 145 over Madrid and 80 over the Sierra Norte, Juan C. Paniagua; 65 over Las Águilas (M) Gabriel; 34 over Madrid, Félix; 80 over Las Rozas (M) Adolfo Rodríguez GOEP; 100 over Collado Villalba (M), 80 over Fuenlabrada (M) 77 over Madrid, info: Juan C. Paniagua; 70 over Valchico stream (M) Jesús Sánchez; 45 over Villamanta (M) E.M.A. group; 58 over Leganés (M) Alfredo Mirat; 48 over Almadrones (GU) Carlos Paulos (DALMA); 78 over Pastrana (GU) Cristina Pintor; 84+172 over Villar del Infantado (CU) Carmen Fernández, Ángel Arellano; 120 over San Juan reservoir, San Martín de Valdeiglesias (M) Mara Brans; 2 large flocks over Sigüenza (GU) Jorge Atance (DALMA); 60 over Terzaga (GU) Daniel Almonacid (DALMA); 102 over Bujarrabal (GU) Jorge Atance (DALMA); 56 circling over Yunquera de Henares (GU) Isabel & Fernando; 45 over Guadalajara, Ana (DALMA); 60 over Móstoles (M), 50 over Valdelatas (M), 11 over San Juan lagoon (M) and 63 over Titulcia (M): info: Juan C. Paniagua; 90 over Salas de los Infantes (BU) Rufino Fernández; 573 at Salburua (AR) EBB, Guardas Anillo Verde; 4 over Txingudi (G) Juan F. Esparcia; 200 over Zizurkil (G) Eneko Díez, Nerea Ixmukane: heard at Oñati (G) Iker Novoa; 22 over El Pedroso de la Armuña (SA) Diego Paniagua; 100 over La Zarza (VA) Toni Alonso; 288 over Arévalo (AV) Víctor Coello; 31 over Marazuela (SG) Miguel A. García; heard at La Granja (SG) Miguel Arribas; 88 over the Sierra de Guadarrama (M) Pablo Pozo, Pablo de la Nava; heard at Navalafuente (M) Natalia Rojas; 28 over Peñarrubias de Pirón (SG) Ignacio Domingo; heard over Alconada de Maderuelo (SG) 98 over Cuerpo de San Pedro (SG) Xavier Parra; 33 over Villalba lagoon (BU) Noelia Álvarez; 74 over Hacinas (BU) Diego Santamaría; 420 over Quintanilla del Agua (BU) Israel Yáñez; 75 over Valle de Egües (NA) Gonzaga Santesteban; 20 over Labiano (NA) Carlos Almagro; 12 over Cásedas (NA) Javi Sola; 39 over San Martín de Montalbán (TO); 30 over Pedro Bernardo (AV) Nacho Sevilla; 50 Algodor (TO) José A. Sancho; 113 over Sureste natural park (M) Rafa Al, García de los Ríos; 29 at Estremera reservoir (CU) Fernando Alonso; 36 over Fuenlabrada (M) Félix Arribas; 18 over Bustarviejo (M) and other groups which couldn't be seen because of low clouds, Gema Pérez; heard at Alcorlo (GU) Mario (DALMA); 127 over Yunquera de Henares (GU) Isabel & Fernando; 5 over Guadalajara, Carlos Arroyo; 61 over Cabanillas del Campo (GU) Cristina Ruiz, Luis Miguel; 40 over Ciudad Universitaria (M) Gema Pérez; 35 over Quijorna (M) Gonzalo Núñez-Lagos; 29 over Alcalá de Henares (M) David Araque; 4 over Valdetorres de Jarama (M) Luis M. Pérez; 120 over Camarma de Esteruelas (M) Óscar Oeo; 3 at Larga lagoon, Villacañas (TO) Alejandro Fernández; 14+29+152+22 over Monteagudo de las Vicarias reservoir (SO) and 230 over Almazán (SO) Fernando Chaguaceda; 100 over Fuentecantos (SO) Juan L. Hernández, Jesús Ruiz; 21 over Guadalajara, Ana (DALMA); 7 over Almería, David C. Huertas; 48 over Hortaleza district (M), 20 over Móstoles (M), 50 over La Morcuera pass (M), 35 over El Retiro (M), 100 over Pinto (M) 80 over Madrid, 86 over Aranjuez (M) and 50 over Algodor (M) info de Juan C. Paniagua; 22 over Fresnedillas de la Oliva (M) John Muddeman, Juan C. Paniagua; 45 over Robledo de Chavela (M) José A. Fimia; 8 over Pinseque (Z) Elena Cantalapiedra; 32 over Hortaleza (M), 200 over Polvoranca (M), 120 over Carabanchel (M); 200 over Esquivias (M), 80 over Pinar del Rey (M) and 95 over Valdelatas (M) info: Juan C. Paniagua; 1,000 at Alcollarín reservoir (CC) Antonio Calvo; 170 at Navalespino reservoir (CO) Miguel Corvillo; 590 over Navalvillar de Pela (BA) Ángel López; 74 over Hacinas (BU) Diego Santamaría; 128 over Vicálvaro (M) info: Juan C. Paniagua; 60 over Puigcerdà (GI) Pau Baucells; 16 over La Almolda (Z) Diana Garín; >213+350 over Cabanillas del Campo (GU) Cristina Ruiz; 35 over Imón (GU); 29 over Guadalajara, Carlos Paulos (DALMA); 90 over Fuencemillán (GU) Javi Calvo (DALMA); 150 over Alcalá de Henares (M) Juan Prieto; 769 have gone over

Cabanillas del Campo (GU) Fernando Gómez (DALMA); 17 over Villimar (BU) David González; 13 over Burgos, Pedro Arratibe; 3 at Petit II reservoir, Brozas (CC); Joaquín Salinas; 5 over Villalonquéjar (BU) David González; 165 over Somosierra pass (M) Beatriz Cortés, Carlos López; Jorge Mañes, Javier Hernández; 80 over Paredes de Buitrago (M) Natalia Rojas; 123 over La Lobera and Las Viñas (AV) and 198 over Cardeñosa (AV) Joaquín Mayo; 325 over Ávila, Juan Parra; 180 over Piedrahita (AV) and 40 over Villar de Corneja (AV) Javi Jiménez; 496 over Cabrillas de Guadarrama (TO) Javier Nicolau; 37 over Toledo, José de Souza, Christy Esmahan; 40 over Mocejón lagoon (TO); 250 over Tarancón (CU) Fernando Alonso; 300 over Ribera de El Maquilón (CU) Fernando Alonso; 310 over Villaconejos (M) Susana B.; 113 over Titulcia (M) Beatriz Bermejo *et al*; 120 over Rivas Vaciamadrid (M) Octavio Infante; 29 over Alcalá de Henares (M) David Araque; 35 over Las Rozas (M) Daniel Ordoñez; 50 over Boadilla del Monte (M) Javier Díaz; 35 over Tres Cantos (M) Manuel Rodríguez; continuous arrival at Gallocanta lagoon at night over Tornos (TE), Sabi Martínez; 100 roost at Cañizar lagoon, Villarquemado (TE) Eva Gascón; 1,430 roost at El Hoyo lagoon (AV) Arón Blázquez, César L. Pintado: heard at 21:30h over Guadalajara, Alfredo; 32 over Talavera de la Reina (TO) at 22:30h, Antonio Alía (ARDEIDAS).

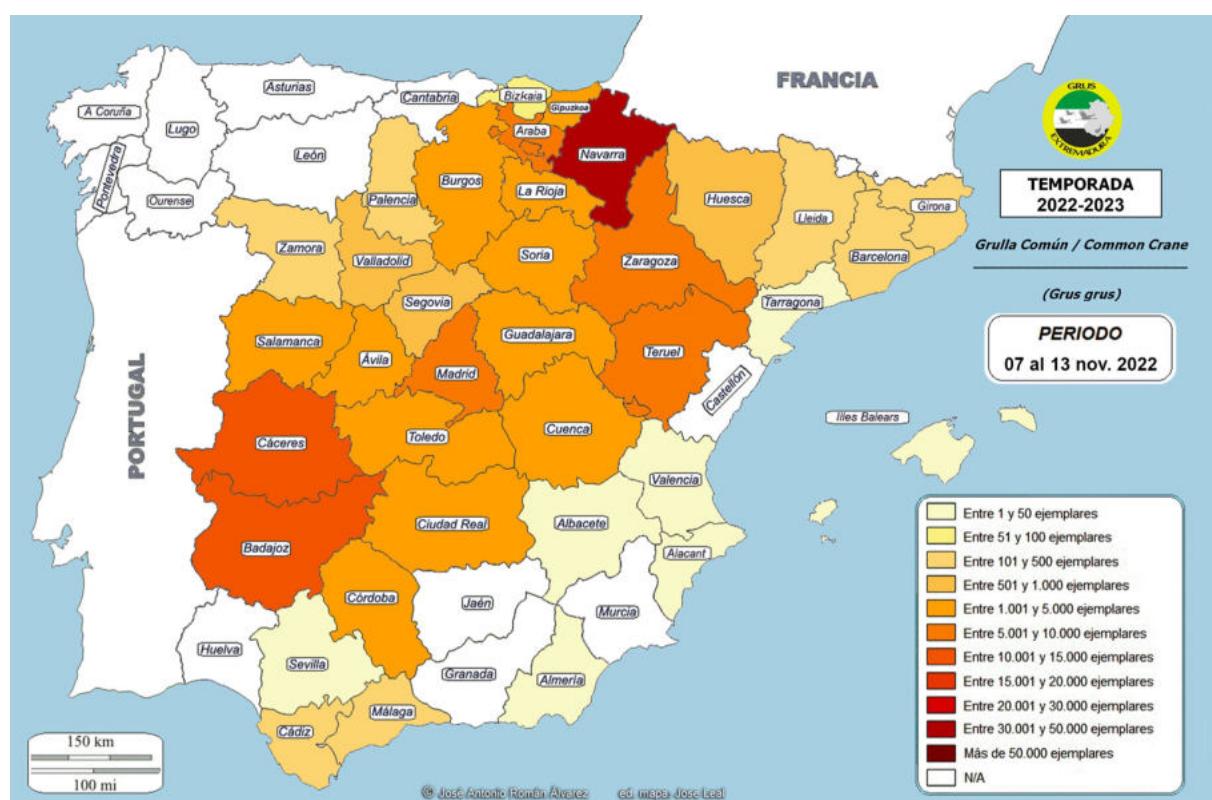
>22,000 over Münster (GE) Johannes Amshoff; 5,080 over Hautes-Fagnes (BE) David Kever; 18,700 over Marburg (DE) Martin Kraft.



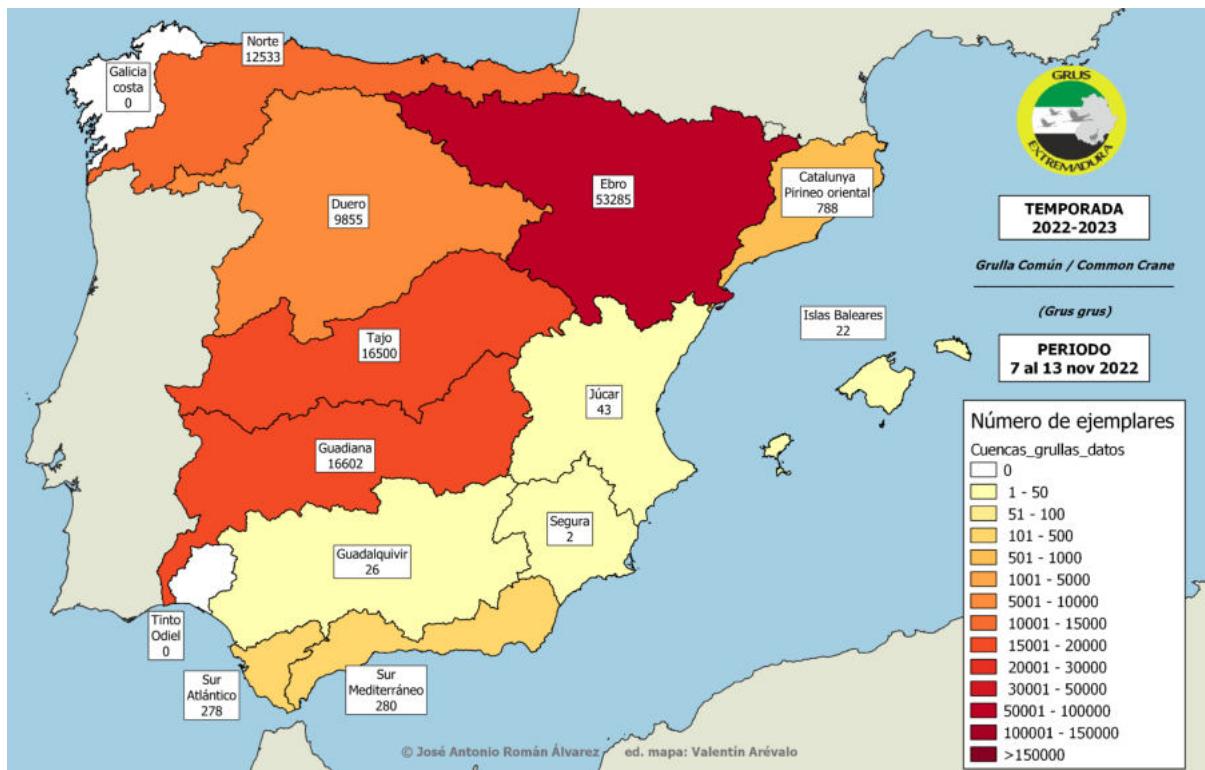
Image nº 20: Cranes over Atapuerca lagoon (BU). Photo: Fede Sancho



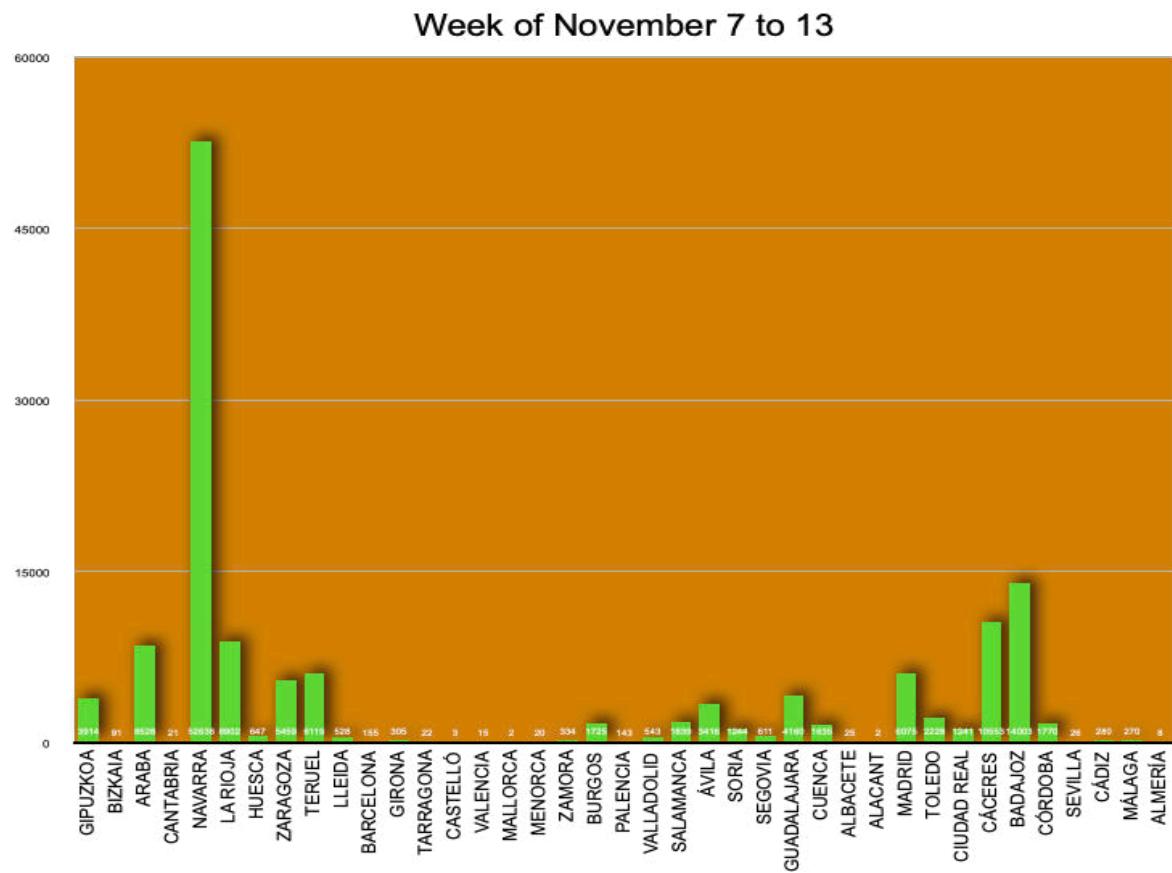
Image nº 21: Cranes leaving Undiano reservoir (NA). Photo: Juan J. Lavilla



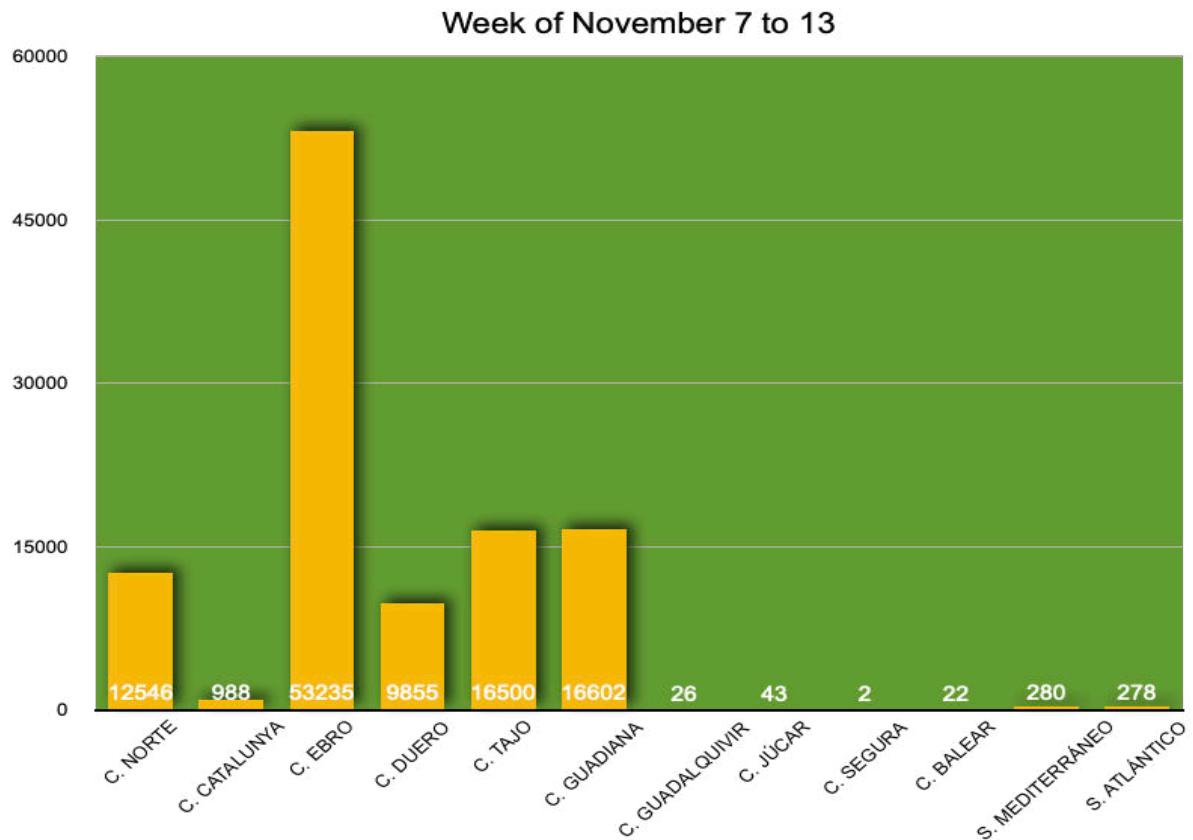
Map nº 15: Migration and distribution by provinces, November 7 to 13



Map nº 16: Migration and distribution by catchment areas, November 7 to 13



Graphic nº 9: Migration by provinces, November 7 to 13



Graphic nº 10: Migration by catchment areas, November 7 to 13

The entry of cranes continues, especially in the first days of the week, and throughout the week the migratory intensity decreases, which could be caused by the arrival of a generalized rainy front, which also influenced visibility and detection of flocks.

14/11/22: Nocturnal flock over Irún (G) José F. Esparcia; 23,500 at dawn at Gallocanta lagoon (TE/Z) Antonio Torrijo; 22 over Amposta (T) Ferrán Latre; 62 over Ivars d'Urgell lagoon (LL); 2 over Pollença, Mallorca (IB) Miguel Recro; 150 over Boadilla (M) Juan C. Paniagua; 100 over Guadalajara Nicolás Durán; 50 over Yunquera de Henares (GU) towards Marchamalo, Isabel & Fernando; 310 over the River Adaja (AV) Juan R. Cuervo; 7 over Aldeanueva de Atienza (GU) Mario (DALMA); 15 in dehesa and 3 at Garbayuela pond (BA) Julian Cendrero; 40 over Cabanillas del Campo (GU) José L. Arias (DALMA); 45 over Sotos de Alfaro (LR) Jesús Ucha; 30 over Autol (LR) Naty Castellet; 410 leave La Loteta reservoir (Z) Esther Charles; 50 over Majadahonda (M) Juan C. Paniagua; 14 over La Veguilla lagoon, Alcázar de San Juan (CR) Vicky García; 60 over Chica lagoon, Villafranca (TO) Carmen Comendador; 3 over Cercedilla (M) Alberto Pantoja; 20 over Muñico (AV) José Mª García; 7 over Logroño (LR) Pedro Sáenz; 22 over Malpartida de Cáceres (CC) Alicia Casillas; 52 over Alfaro (LR); large flock over Guadalajara, Isabel & Fernando; 1 over Cuzcurrita de Río Tirón (LR) Paula Benito; 4 (1 juvenil) in rice fields at Cappdesaso (HU) Eduardo Gracia; 53 over Ugena (TO) Conchita Torres; 300 over Riglos (HU) Pablo Vallés; 12 in Odiel marshes (H) Joaquín Vázquez; 23 over Sant Cugat del Vallès (B) Enric Ortega; 2 over Vilanova i la Geltrú (B); Tim Johnson; 30 over Caldes de Malavella (B) Daniel Bonnici;

12 at Bujaraloz (Z) Conchi Escanilla; 70 over Atapuerca (BU) José M^a Ayuela; 17 over Villatoro (BU) Fidel Martín; 14 over Burgos, Marco Alonso, Rafael Díez; heard at Guadalajara, Javi Rejos (DALMA); 2 over Fuente del Maestre (BA) Rubén Ramos; 299 over Valdegallo (Z) José L. Tella; 4 over Tomelloso (CR) Joaquín Jiménez; 40 over Miranda de Ebro (BU) José L. Cobo; 20 over Cogollos (BU) and 15 over Lerma (BU) Israel Yáñez; 3 at the estuary of the River Antas (AL) Milenka Djukanovich, Jorge J. Rueda; 622 at La Zolina reservoir (NA) Cuevas Ruiz; 18 over Mendixur (AR) Jon Iratzagorría; 174 over Ávila and 9 over Fresno y La Pelmaza (AV) Alfonso Guío; 4 at La Pedraza reservoir, Guadalix de la Sierra (M) Jesús Ruiz; 150 over Boadilla del Monte (M); 50 over Majadahonda (M) 150 over Lozoya (M); 57 over Moratalaz (M) Alberto Pantoja; 17 at Tablillas del Záncara (CR) Pedro Bustamante; 31 at Arroyoconejos reservoir (BA) Antonio Núñez; 50 over Barajas (M) Delfín González; 623 go to roost at La Colada reservoir (CO) Juanma Sánchez; 60 at Fuente de Piedra lagoon (MA) Antonio Tamayo, Francis Mediavilla; 50 over Guadalajara, Fernando Alonso (DALMA); nocturnal passage at 22:17h over Barasain (NA) Jerzy Wojtysiak; 153 at Monteagudo de Las Vicarias reservoir (SO) Pilar Abad; 25 over El Pardo (M) Marco Escuredo (GOEP); 480 over Arnedo (LR) Yolanda Hernández; 300 over Valverde de Rioja (LR) José Benedí; 25 over Montmell (T) Andy Elliot; heard at Talarn (LL) Jordi Casfilló; 40 over Granada, Andrés Rojas; 22 in s'Albufera natural park, Mallorca (IB) Dani Zamora, Daniel Hinckley; 47 over Punta Nati, Menorca (IB) Teresa Subiza; 14 in Salobrar natural park, Mallorca (IB) Petra Jensen; 20 over Villar de Corneja (AV) José Jiménez; 50 over Torrejón de Ardoz (M) Mireia A.F.; 300 at Valdecaballeros reservoir (BA); 8 over Rincón de Ballesteros (CC) Francis Martín; 6 over Madrid, Juan C. Hidalgo, Elena Baonza; 100 over Majadahonda (M) Rafael Hidalgo; 180 over Villanueva de la Cañada (M) Edmundo Bell; 34 at Villamayor reservoir, Valdemorillo (M) Manuel Vega; 50 at Lagartera (TO) César Clemente; 50 over Torrejón de Ardoz (M) Mireia A.F.; 390 at La Janda lagoon (CA) Laura Rollán; 10 at Aldea de Cuenca (CO) José Cañas; 80 over Villaviciosa de Odón (M) Mark Davis; 80 over Calera y Chozas (TO) Fernando E. Navarrete; 65 over Las Ventas Con Peña Aguilera (TO) Javier Gómez.



Image nº 22: Cranes over Punta Nati, Menorca (IB). Photo: Teresa Subiza.

15/11/22: 9 over Llanos de la Velada (TO) Adrián Illescas (ARDEIDAS); 4 in rice fields at Capdesaso (HU) Eduardo Gracia; 350 set off from La Loteta reservoir (Z) Esther Charles; 37 between Galinduste (SA) and Armenteros (SA) Vega Bermejo; 52+92 over Cabanillas del Campo (GU) José L. Arias (DALMA), Luis Miguel (DALMA); 12 over Guadalajara, Carlos Arroyo; 100 over Yunquera de Henares (GU) Fernando Gómez (DALMA); 10 over Fontanar (GU); 35 over Guadalajara, Isabel & Fernando; 50 over Calahorra (LR) Jesús Ucha; 12 over Logroño (LR) Ignacio Gámez; 112 circling over Pozuelo de Aragón (Z) Esther Charles; 47 at Bujaraloz (Z) Conchi Esteban; 18 over Olías del Rey (TO) Joaquín; 10 over Alba de Tormes (SA) Gonzalo Criado; 1,583 roost at El Hoyo lagoon (AV) José M^a García; 16 over Cabanillas del Campo (GU) José M^a Gómez (DALMA); 9 over Albarreal de Tajo (TO) Marco Ansón; 58 over Vitoria/Gasteiz (AR) Azaitz Unanue, EBB; 4 over Esclet (GI) Daniel Bonnici; 15 over Quinto (Z) Alfredo Sánchez; 300 at La Nava lagoon (P) Fernando Jubete Guzón; 30 in Salobrar natural park, Mallorca (IB) Daniel Hinckley, Dani Zamora; 27 at Lagartera (TO) César Clemente; 10 over Valdelatas pinewoods (M) Pablo Pozo; 300 over Casas de San Galindo (GU) Ángel Vela; 21 over Ávila Luis J. Martín; 332 at La Zolina reservoir (NA) Jorge Nubla.

16/11/22: 15 over Ávila, José M^a García; 22 in rice fields at Capdesaso (HU) Eduardo Gracia; >200 over Puebla de Alcocer (BA) Yasmina Annicchiarico; migration begins at 10:30h from Gallocanta lagoon (TE/Z) Antonio Torrijo; 156 at Bujaraloz (Z) Francisco J. Sampietro; 90 circling at Pozuelo de Zarzón (M) Esther Charles; 8 over Girona, Carlos Arroyo; 7 over Almenara marsh (CS) Miguel Crespo; 64 over Alfaro (LR) Rodrigo Baldera; 30 over Paniza pass (Z) Javier Domínguez; 6 over Serradilla (CC) Achilles Cods; 14 over Deltebre (T) Mayca Martí; 25 over Valladolid, Carlos González; 394 at Lácara (BA) and 2,945 roost at Alange reservoir (BA) José A. Román; 89 over Madrid, Héctor; 86+36 over Zaragoza, Fernando Herrero, Coral Jordán; 153 at Bujaraloz (Z) Conchi Esteban; 16 over Ainzón (Z) Esther Charles; 86 over Casa de Campo, Mérida (BA) Ángel Sánchez; 8 over Plenas (Z); 10 over Terin (TE) Bianka; 4 at Caño del Juncal (SE) Steve Hutchinson; 1 at Arenas de San Juan (CR) M^a José Valencia; 3 over Ávila, Juan Parra; 2 at Pas reservoir (HU) Ayla Monllor; 209 over Calahorra (LR) Javier Ochoa, Jesús Ucha; 64 over Alfaro (LR) Rodrigo Baldero; 3 at La Zolina reservoir (NA) Haritz Sarasa; 40 over Abay (HU) Daniel Barceló 85 at Boada de Campos lagoon (P) Josep Manchado, Alberto Laiz, Rafael Hermosilla, Fernando Jubete Tazo, Juana M^a Guzón, Fernando Jubete Guzón; 32 over Utebo (Z) Jesús Rodríguez; 19 over Quinto (Z) Alfredo Sánchez; 300 at El Cañizar lagoon (TE) Pascual Monferrer.

433,620 have been censused in Hesse (Marburg and Giessen) -GER-, during the migration period. Martín Kraft et al.



Image nº 22: Cranes over Villagonzalo (BA). Photo: José A. Román.

17/11/22: 50 over Badenas (TE) Dianka, Laila Aranda; 2,000 at Honda lagoon, Campillo de Dueñas (GU) Antonio Torrijo; 15 over Majadahonda (M) Esther Murciano; 3 in Castelló marsh (CS) Ubaldo Fernández; 5 over Corral-Rubio (AB) Marcelo Quesada; 1,100 at El Hoyo lagoon (AV) Víctor Coello; 86 at La Nava lagoon (P) Walter Van Kerkhoven; 20 over Cabezón de Pisuerga (VA) Jesús Higueras; 250 at Sotos de Alfaro (LR) Borja Sanz; 214 roost at Santa Teresa reservoir (SA) Vicente G. Garrudo; 175 over Huesca, Pedro Torres; 360 at La Nava lagoon (P) Fernando Jubete Guzón; 9 over Herreruela (CC) Antonio Galán; 90 over Corella (NA) Adrián M. 60 over Monreal (NA) Almudena García; 39,869 are censused at Gallocanta lagoon (TE/Z) S.A.R.G.A.

19,488 are censused in Arjuzanx nature reserve (FR) Sophie Laugareil et al.





Image n° 23 : Family of cranes in the Castelló marsh, in which it can be seen that the adult on the left lacks a red crown, this could be due to a phenotypic trait since it would be difficult for it to be a specimen of the *Grus grus* subspecies *archibaldi* as their closest populations are in Georgia. Photo: Ubaldo Fernández

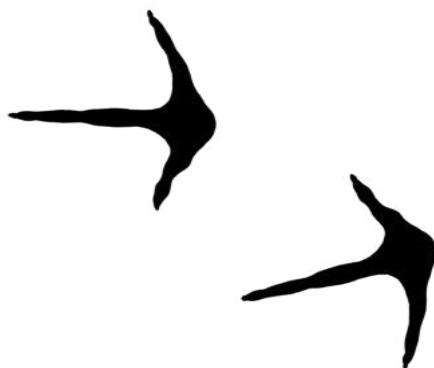
18/11/22: 4 over Fuentes (CU) Nuria Chacón; 59 at Salada Grande, Alcañiz (TE) Esther Yera; 145 circling over El Pardo (M) Marcos Escuredo (GOEP); 13 over Leiva (LR) Lidia Roncero, Ignacio Gámez; 692 leave La Loteta reservoir (Z) Esther Charles; 2,560 over Villagonzalo (BA) coming from Alange reservoir; migration departures from Gallocanta lagoon (TE/Z) Carmina Franco; 52 over Torralba de Calatrava (CR) Raquel Ramiro; 150 over Medinaceli salt workings (SO) Mª José M. Cenamor; 378 at Los Canchales reservoir (BA) Elvira del Viejo; 18 over Calzadilla de Los Barros (BA) José L. Bautista; 1,300 roost at Sotonera reservoir (HU) Silvia Duque, Francisco Quesada; 531 in Los Pedroches (CO) Juanma Sánchez; 76 over Cespedosa de Tormes (SA) Fernando Aranguren; 40 over Alconchel de la Estrella (CU) and 32 over Montalbanejo (CU) Joaquín Jiménez; 184 at Santa Teresa reservoir (SA) Miguel Rodríguez; 24 at Granja de Granadilla (CC), 90 at La Fresnedilla pond, Oliva de Plasencia (CC), 14 at Gabriel y Galán reservoir (CC), 78 at Zarza de Granadilla (CC), 14 at La Jarilla (CC) and 40 at El Estanco lagoon, Oliva de Plasencia (CC) Hugo Sánchez; 6 over Plasencia (CC) Alonso García; 443 at Rosarito reservoir (AV) David García; 3 at Navalcarnero (TO) César Clemente; 81 over Madrid, Pablo de la Nava; 270 roost at Sotos de Alfaro (LR) Borja Sanz; 4,200 roost at Borbollón reservoir (CC) Miguel Todón; 25 over Caldes de Malavella (GI) Daniel Bonnici; 5 at Ricoballos reservoir (ZA) Gary Losada; 550 in Villafáfila nature reserve (ZA) Gary Losada; 140 at Torviscal (BA) José A. Román; 10 over Sollana marsh (V) A. Torres; 18 over Cuerda del Pozo reservoir (SO) Andrés Riaguas. .

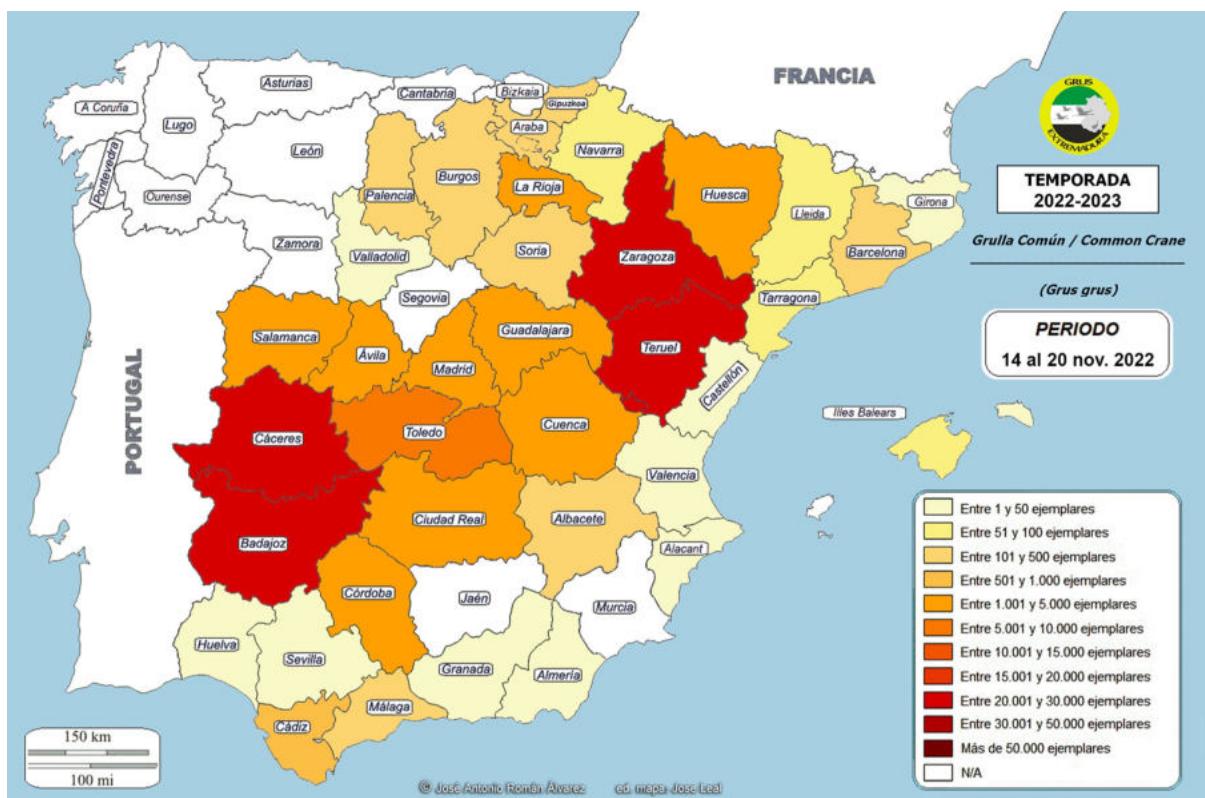
19/11/22: 102 over Almendralejo (BA) José A. Román; 582 at Villacañas (TO) Ángel Velasco; at 08:30h cranes leave from Gallocanta lagoon (TE/Z) Carmina Franco; 14+28 in rice fields at Capdesaso (HU) Eduardo Gracia; 120 over Torre de Abraham reservoir (CR) Esther Murciano, Carlos Guillli, Álvaro García; 4 at La Granjuela (CC) Pedro; 200 arrive at La Colada reservoir (CO) Carmen Valle, Candy Valle; 300 in dehesas, Los Pedroches (CO) Candy Valle; 44 over Zaragoza, Francisco J. Sampietro; 127 over Quintos de Mora (TO) Esther Murciano, Carlos Guillli, Álvaro García; 197 at Santa Teresa reservoir (SA) Vicente G. Garrudo; 2 at Castelló d'Empuries (GI) Luis Trentin; 1 at Soser (LL) Ferrán Riba; 12 roost at Villalba de los Barros reservoir (BA) Juan G. Miranda; 100 over El Pardo reservoir (M) Carlos Escuredo (GOEP); 765 at Pizarro (CC) Neil Renwick; 800 at La Janda (CA) Abel Moreno; 5 in Almenara marsh (CS) José V. Martí; 120 at Tablas de Alarcos (CR) José Gómez; 22 at La Veguilla lagoon (CR) Luis Jiménez; 200 at El Taray lagoon (TO) Jaime García, Pablo Barrero; 29 over Gerindote (TO) Cristina Gómez; 45 over Cambrillos de Guadarrama (TO) Javier Nicolau; 12 over Villaviciosa de Odón (M) Mark Davis; 120 over Serranía de Cuenca, Fernando Alonso; 385 over San Mateo de Gállego (Z) Ángela Montesinos; 43 in dehesas, La Roca de la Sierra (BA) Arturo Pérez; 123 in dehesas, La Nava de Santiago (BA) Raúl Pérez; 25 over Esparragalejo (BA) Gerardo Pizarro; 8 at Usagre (BA) Jorge Sáfara; 17 at Bienvenida (BA) José L. Bautista; 200 at Fuente de Piedra lagoon (MA) Elaine Miller; 259 circling at Sotos de Alfaro (LR) Ignacio Gámez, Jonathan; 10 at La Llosa (CS) Juan Villora; 8 Abejar (SO) Isabel Jorge; 10 Leiva (LR) José I. Sáenz; 47 at Hinojal (CC), 90 at Talaván reservoir (CC) and 17 at Camacho pond, Talaván (CC) Javier Prieta; 339 over La Pueblonueva (TO) Pedro Vergel.



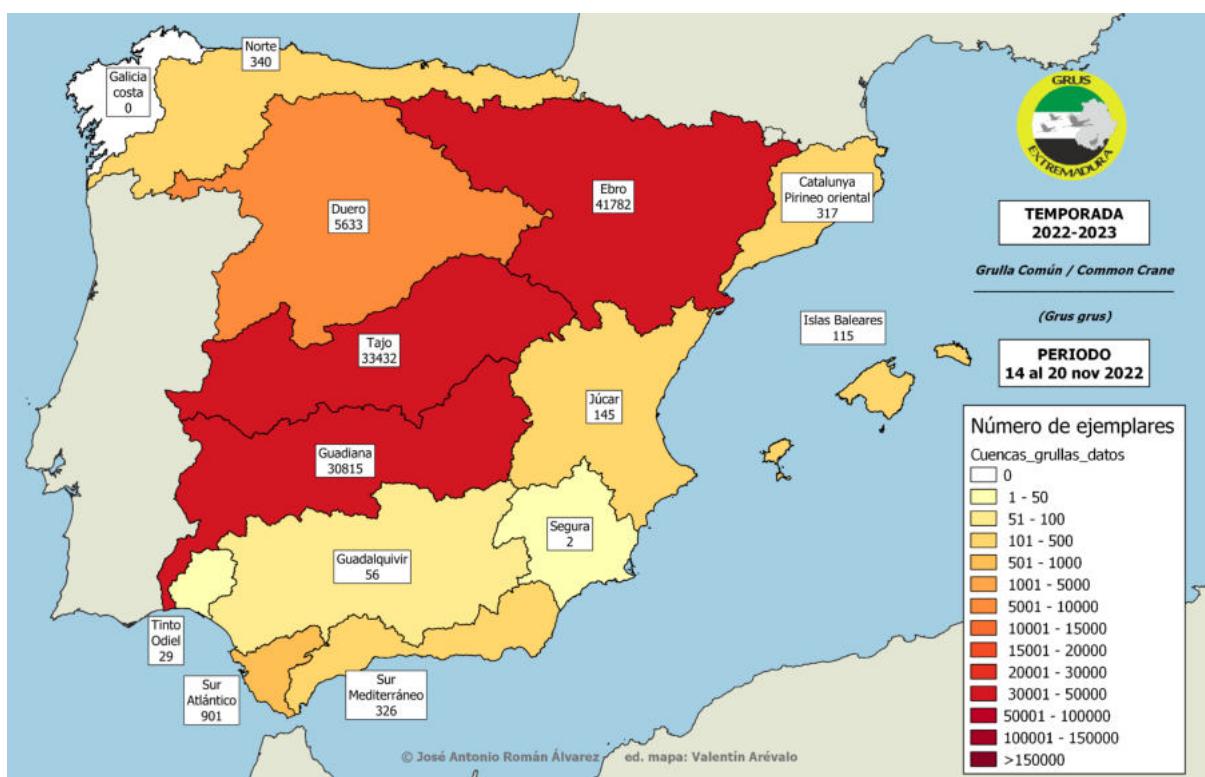
Image nº 24: Cranes at Pizarro (CC). Photo: Neil Renwick

20/11/22: Nocturnal passage by 6 groups from 04:45h over Elorrio (G) Aitor Zabala; 3,100 have roosted at Peña Hueca and Taray lagoons, Villacañas (TO) Ángel Velasco; 114 to the south of Almendralejo (BA) José A. Román; 15 over Jarandilla (CC) Sofía Moreno; 286 at Bujaraloz (Z) Arnau Guardia; 840 at La Janda lagoon (CA) Arkadiusz Broniarek; 1,200 in dehesas, Valdecaballeros (BA) José M^a Traverso; 436 over Ejea de los Caballeros (Z) Javier López; 2 at Sanlúcar la Mayor (SE) Francisco J. Salcedo; 17 over Txingudi marshes (G) José F. Esparcia; 10 over Los Blázquez (CO) Marga Martín; 8 over Ciudad Real, Raquel Ramiro; 60 over Bañón (TE) Pilar Edo; 1 over Pontón (V) Rafael Muñoz; 6 at L'Alcudia (V) Julia Cerveró; 33 at Pétrola-Corral Rubio (AB) Fernando Rico; 12 roosted at El Pardo reservoir (M), from where they set off on migration mid-morning, Marcos Escuredo; 31 at Navaseca lagoon (CR) M^a José Valencia; 4 at Corta de Olivillos (SE) Paco Chiclana; 8 over Sitges (B) Enric Mozas; 8 over El Prat de Llobregat (B) Quique Carballal; 30 over Albero (HU) Eduardo Gracia; 82 at Aldea del Cano (CC) José M^a Rojo; 103 over Peñaflor de Gállego (Z) María Berna; 40 over Tafalla (NA) Juan I. Deán; 10 over Rubió (B) Enric Ortega; 6 over Cambrils (T) Marius Domingo; 23 over Basses de La Foia (T) Miguel Recro; 20 over Daganzo de Arriba (M) Jorge Díaz; 60 over Renera (GU) Susan Alcolea; 13 over Txingudi (G) Mikel Estonea; 18 at San Salvador reservoir (HU) and 11 at El Pas reservoir (HU) Victoria Torrente, Jesús Lavedán; 70 arrive at La Hoya del Pozo, Corral Rubio (AB) Raquel Mansilla; 50 circling at Pozuelo de Aragón (Z) Teresa Pueyo; 81 over Tablas de Daimiel National Park (CR) Esther Murciano; 25 over Ledesma (SA) María J. Benítez; 30 cross the Straits of Gibraltar from Tarifa (CA) Alejandro Onrubia; 20 over the River Ayuela (CC) Mariano Cabrero; 58 over Villar del Infantado (CU) Ángel Arellano; 6 at Castelló d'Empuries (GI) Valentín Jego; 10 over Rubió (B) Enric Ortega; 1,482 go to roost at El Hoyo lagoon (AV) Cruz González, José M^a García, Arón Blázquez; 15 at Isla Mayor (SE) and 1 at Aznalcázar (SE) Rafael Carmona; 63 over Salburua (AR) EBB; 1 in Río Palmones marsh (CA) José L. Garzón, Andrés Rojas; 7 at El Gosque lagoon (MA) Victoriano Mora; 76 in the Navahermosa area (MA) Miguel Juan, Ignacio Barrionuevo; 2 in El Hondo natural park (A) Jorge Peláez; 23 over Monfragüe National Park (CC) Yass Fuentes; 57 over Calzada de Oropesa (CC) Sergio Mayordomo; 300 at Castrejón reservoir (TO) Javier Nicolau; 80 over Aranjuez (M) Juan Fernández; 6 over Sureste natural park, Velilla de San Antonio (M) Juan C. Hidalgo, Elena Baonza; 20 over Valdebebas (M) Christophe Pontegnie, Carlos Fernández; 32 in Dehesa de Moncalvillo (M) Francisco Parras; 2 at Pedrezuela reservoir, Guadalix de la Sierra (M) Jesús Ruiz; 18 at San Salvador reservoir (HU) Victoria Tauste, Jesús Lavedán.



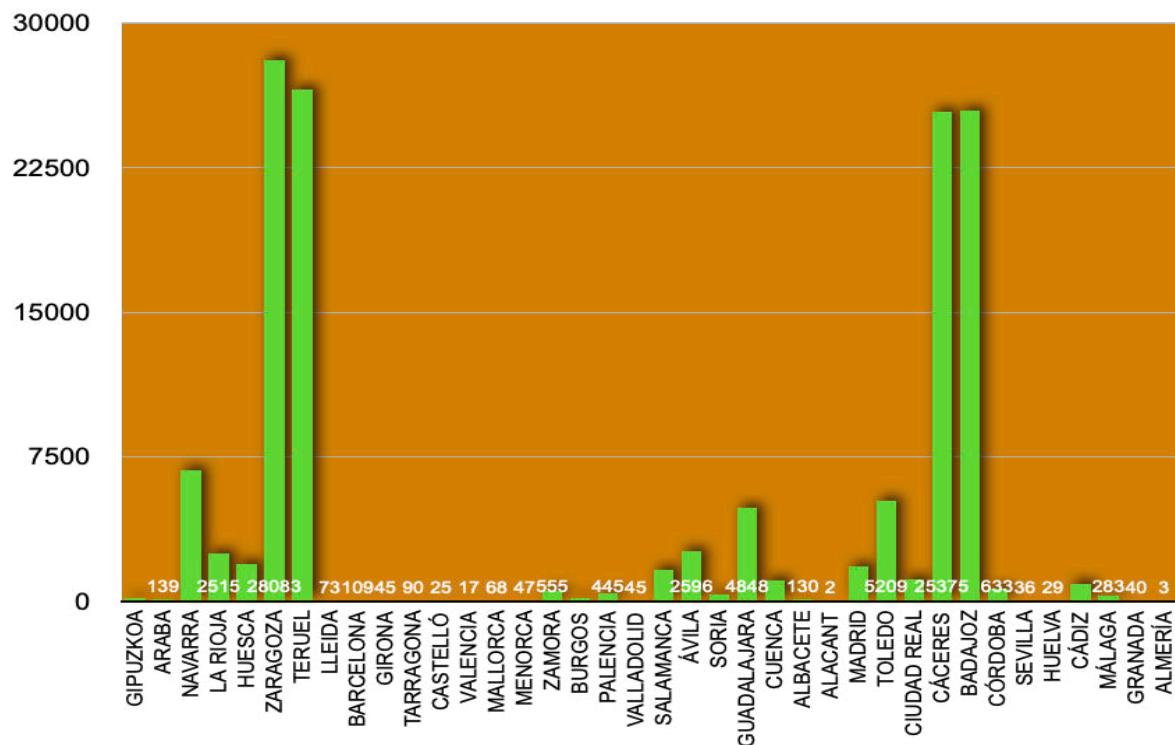


Map nº 17: Migration and distribution by provinces, November 14 to 20



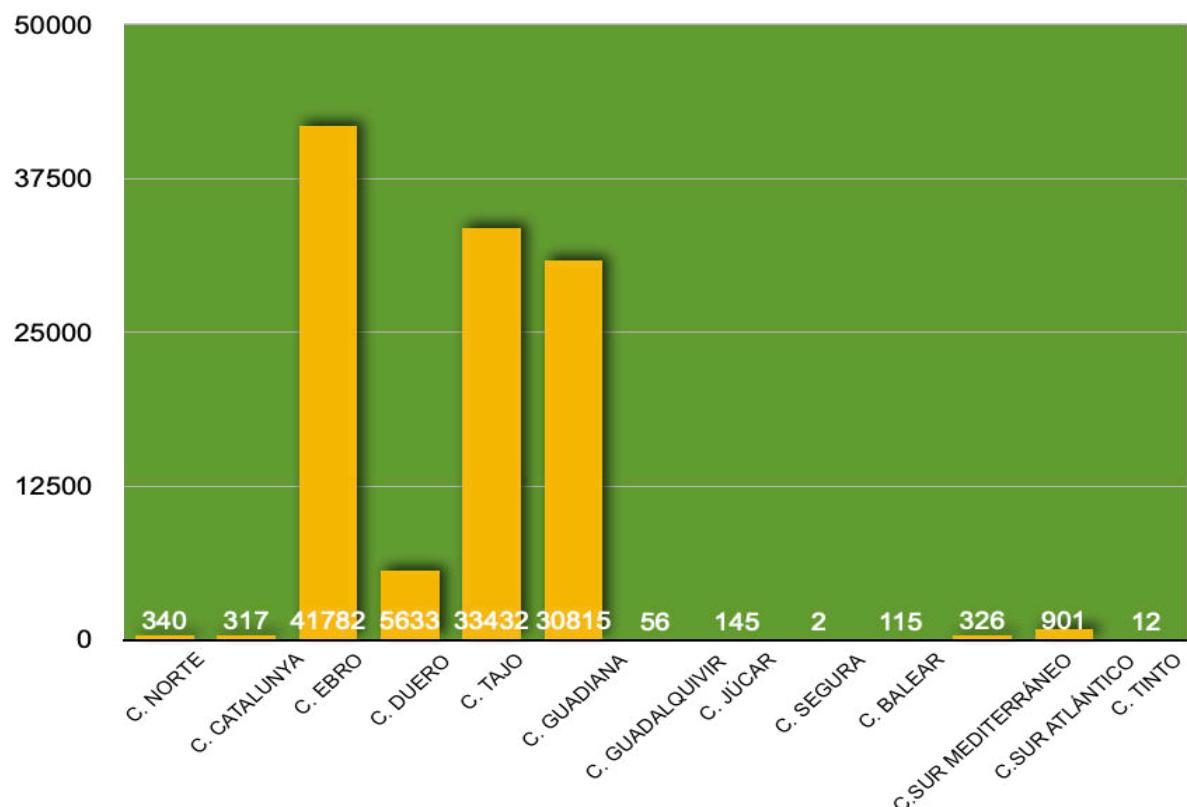
Map nº 18: Migration and distribution by catchment areas, November 14 to 20

Week of November 14 to 20



Graphic nº 11: Migration and distribution by provinces, November 14 to 20

Week of November 14 to 20



Graphic nº 12 : Migration and distribution by catchment areas, November 14 to 20

A week of transition, with an apparently discreet entry of migrants, although the weather conditions of generalized rain and low cloud did not allow an adequate monitoring to be done, and only during the weekend was a new arrival of birds detected through Catalonia.

21/11/22: 6 over Logroño (LR) Maribel Gutiérrez; 3 in dehesa, Hinojosa del Duque (CO) Pedro; 169 over Sotos de Alfaro (LR) Jesús Ucha; 32 over Alcolea de Tajo (TO) and 32 at Lagartera (TO) Marco Ansón; 2 over Salburua (AR) E.B.B.; 3 over San Mateo de Gállego (Z) José M^a Sánchez; 40 at Chica lagoon, Villafranca (TO) Sergio Mayordomo, César Clemente, Macarena Cuadrado; 178 in dehesa, La Aldea del Obispo (CC), 14 in dehesa, Torrecillas de la Tiesa (CC) and 3 over Salto del Gitano, Monfragüe National Park (CC) André Geelhoed; 4 at Guadiloba reservoir (CC) Fátima Romero; 350 at Valdesalor reservoir (CC) Francis Martín.

22/11/22: 1 over Lobón (BA) Francisco Lopo; 5 over Almendralejo (BA) José A. Román; 99 over Morata de Tajuña (M) Gonzalo Criado; 3 over Santa Ana (CC) José M^a Rojo; 139 over Retuerta del Bullaque (CR) Gerardo García; 18 over Arganda de Rey (M) Gonzalo Criado; 166 at Alcañiz salt flats (TE) Esther Yera; 1,500 around J.A. Valverde visitor centre, Doñana National Park (SE) Eva Garzón; 7 over Domeño Nuevo (V) Víctor París; 120 at Corral Rubio (AB) Manolo Salas; 166 at Calera y Chozas (TO) Marco Ansón; 108 over Trujillo (CC) André Geelhoed; 14 over Santo Domingo de Crudilla (TO) and 4 over Maqueda (TO) Patricia Andrés; 20 at Campillos (MA) Miguel A. Herrero; 3 at Sollana (V) Miguel Barber; 26 in Almenara marsh (CS) Marta Ibáñez; 45 over Toledo, Joaquín; 3 at Maguilla (BA) Martín Kelsey; 150 at La Colada reservoir (CO) Paco Cabrera; 7 in the Ebro Delta (T) Virgilio Beltrán; 83 at Sotonera reservoir (HU) Juan C. Albero; 38 over Zaragoza, Aitor Mora; 1 at Las Cañas reservoir (NA) Javier Robres; 14 over La Pedrezuela reservoir, Guadalix de la Sierra (M) Enrique Villegas, Ricardo Diez, Javier Paricio, Manuel Segura; 14 over Santillana reservoir (M) Daniel Diaz; 130 over Albarreal de Tajo (TO); 6 over the River Tiétar, Talayuela (CC) Gerardo Pizarro; 30 over Fondón (AL) Esperanza Santoro; 600 over Puente Ajuda, Olivenza (BA) Joaquín Mazón, José L. Vinagre.

23/11/22: 45 at El Ojo, El Poyo del Cid (TE) Antonio Torrijo; 25 over San Lorenzo de Flúmen (HU) Eduardo Gracia; 160 over Caminreal (TE) Antonio Torrijo; 13 over Alfaro (LR) Andrés de la Torre; 17 over Retuerta del Bullaque (CR) Gerardo García; 11 over Sotos de Alfaro (LR) Miguel Martínez; 400 at Las Merinillas (BA) José L. Vinagre; 2 at El Hondo reservoir (A) Jon Clark; 180 at San Salvador reservoir (HU) Juan C. Albero; 4 over Arrocampo reservoir (CC) Tim Boucher; 250 in Villafáfila nature reserve (ZA) Xurde Acebrás; 240 at Casa de Hitos, Madrigalejo (CC) Raymond York; 15 in Brazo del Este (SE) Elena Vs; 140 at Valdesalor reservoir (CC) Francis Martín; 45 at Casas de Don Antonio (CC) Francisco A. Prieto; 17 over Grande lagoon, Villafranca (TO) Carmen Comendador.



Image nº 26: Cranes in feeding habitat at Villagonzalo (BA). Photo, José A. Román.

24/11/22: Group over Montoro (CO) Manuel Moral; 128 at Corral Rubio (AB), where another 23 arrive on migration, Marcelo Quesada; at 12:00h migration began at Gallocanta lagoon (TE/Z) Antonio Torrijo; 18 over Almendralejo (BA) José A. Román; 320 at Bujaraloz (Z) Esteban Hernández; group over Guadalajara, Javi Calvo (DALMA); 8 at Ulldecona (T) Claudi Bages; 23 over Valverde de Leganés (BA) Joaquín Mazón, José L. Vinagre; 500 at Aznalcázar (SE) André Geelhoed; 56 at La Cuerda del Pozo reservoir (SO) José L. Hernández; 6 at Camino de Villafranca lagoon (CR) Pedro Bustamante; 32,003 are censused at Gallocanta lagoon (TE/Z) S.A.R.G.A.; 28 at La Llosa (CS) Marta Ibáñez, Josep Bort; 138 over Alcázar de San Juan (CR) Marco Ansón; 7,000 at La Parada reservoir, Used (Z) Pilar Edo; 3,000 on Zarzalejos plain, Logrosán (CC) Chemi Ibáñez; 10 at Marchamalo salt works, Cabo de Palos (MU) Gordon Shaw; 200 at Manjavacas lagoon (CU) Fernando Alonso; 2 at Guadiana weir, Badajoz, Juan A. de Medina; 12 over Grande lagoon, Villafranca (TO) Carmen Comendador; 3,427 go to roost at Borbollón reservoir (CC) Miguel Todón.

19,932 are censused at Arjuzanx nature reserve (FR) Sophie Laugareil et al

25/11/22: 51 over Retuerta del Bullaque (CR) Gerardo García; 23 over Sotos de Alfaro (LR) Andrés de la Torre; 100 over Daimiel (CR) Candy Valle; 30 over El Higuerón (CO) José Cañas; 19 over Daimiel (CR) Raquel Ramiro; 10 at Dulce lagoon, Campillos (MA) Barbara Laycock, Derek Etherton; 23 at El Pas reservoir (HU) Juanán Novales; 42 at Alcázar de San Juan (CR) Pedro Bustamante; 144 at El Vicario reservoir (CR) Manuel Ruiz; 3 over Mirandilla (BA) Francisco Macías; 48 at Talaván reservoir (CC) Agapito J. Verde, Francisco A. Prieto; 90 at La Nava lagoon (P) Rafael Hermosilla; 133 at Fuente de Piedra lagoon (MA) Barbara Laycock, Derek Etherton; 20 over Albarracín (HU) Miguel A. Martín; 105 over Campillo lagoon (M) Rafa Al; 54 over Aranjuez (M) Sonia Wandosell, Diego Martínez; 121 over Villar del Olmo (M) Juan C. del Moral; 82 at Cleto ponds, and 18 in dehesa, San Benito, Jaraíz de la Vera (CC) Ángel L. Méndez; 10 over Pago de San Clemente (CC) Martín Kelsey; heard at José Toral reservoir (SE) Vicent Esteller; 600 at El Cañizar lagoon (TE) Miguel A. Martín; 1,223 at El Hoyo lagoon (AV) Alfonso Guío, Miguel Martín.



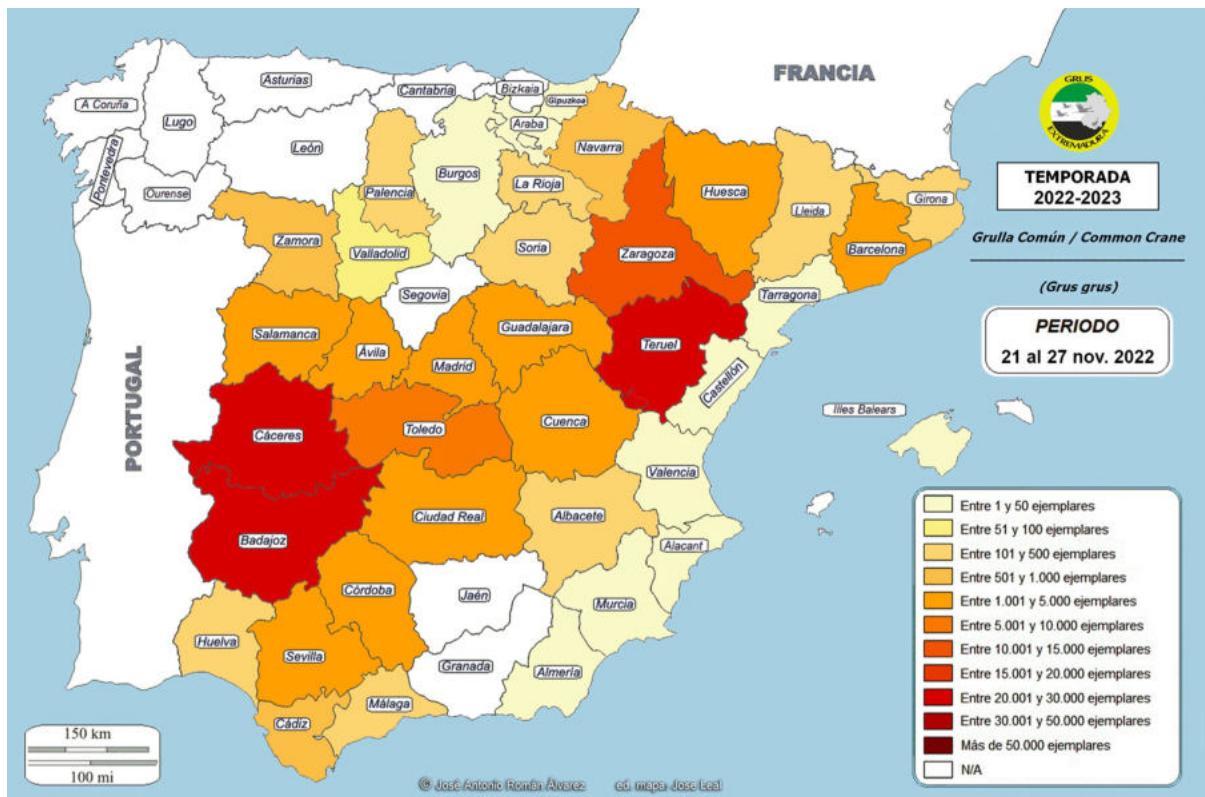
Image nº 27: Family of cranes beside the River Cubilar (CC). Photo: José A. Román.

26/11/22: 575 have roosted at Peña Hueca and Taray lagoons, Villacañas (TO) Ángel Velasco; 100+159 over Ugena (TO) Luis Sicilia, Conchi Conde; at 11:13h migration began at Gallocanta lagoon (TE/Z) Antonio Torrijo; 31 at Sotos de Alfaro (LR) Andrés de la Torre; 26 over San Pedro del Arroyo (AV) Arón Blázquez; 25 over La Guardia lagoon (TO) Esther Murciano, Alberto Pantoja; 60 over Guadalajara, Gema Pérez; 7 in rice fields at Capdesaso (HU) Eduardo Gracia; 237 over Yunquera de Henares (GU) Isabel & Fernando; 172 over Llongar lagoon, Lillo (TO) Esther Murciano, Alberto Pantoja; 200 over Guadalajara, Jesús M^a Serrano (DALMA); 110 over Usanes (GU) Mario (DALMA); several hundreds over Madrid, Alberto Carreño; 23 from El Pulgar, Tudela (NA) towards Cintruénigo, Michel Marín; 80 over Isasa (LR) Javier Ochoa; 70 over Arnedo (LR) Chema; 36 over Sotos de Alfaro (LR) and 90 between Murillo de Río Lena and Lagunilla del Jubera (LR) Álvaro Sarriamán; 15 over Alfaro (LR) Michel Marín; 53 at the roost at Santa Teresa reservoir (SA) Vicente G. Garrudo; 50 over Zaragoza, Conchi Esteban; 400 roost at Malvecino reservoir, Pinsoro (Z) José A^a Pinzolas; 3 over Sant Adriá del Besòs (B) Robert Álvarez; 30 at Deltebre (T) Àlex Fonollosa; 500 over Casserres (B) Jordi Serrano; group over Ministrol (B) Marta Puigdomènech; 1,000 over Perafita (B) Jordi Faus, Jordi Clavel; 75 over Plegamans (B) Xabi Escobar; 31 over Rubí (B) Víctor Espadas; 7 over Terrassa (B) Irene Sánchez; 60 over Madrid, Juan C. Paniagua; 9 over El Puerto de Santa María (CA) Rafael García; 3 at El Hondo reservoir (A); Jon Clark; heard at Sollana (V) Carlos Clarademunt; 32 in Almenara marsh (CS) Andrés Balfagón, Joan Balfagón; 18 over Borriana (CS) Jordi Miralles; 50 over Llubí, Mallorca (IB) Miguel Vallespir; 3 over the River Besòs (B) Josep del Hoyo; 4 over Barcelona, Oriol Palom; 130 over L'Escala (GI) Bernat Garrigues; 25 over Linyola (LL) Xavier Parra; 28 at Dos Reinos lagoon (NA) David Miqueleiz; 60 over Castejón de Ebro (NA) Gorka Gorospe; 65 over Saúca (GU) John Muddeman; 450 at El Cañizar lagoon (TE) Miguel A. Martín; 3 over Viladecans (B) Arnau Bonan; 16 over Monzalbarba (Z) José A. Domínguez; 50 over Bustarviejo (M) Daniel Díaz; 30 at Pedrezuela reservoir (M) Javi Fernández; 73 over Santillana reservoir (M) Francisco Vizcaíno; 56 over Moralzarzal (M) David Guillén; 42 over Madrid, Rafa Al; 8 over El Retiro park (M) Juan A. Ximenis; 80 over Leganés (M) María

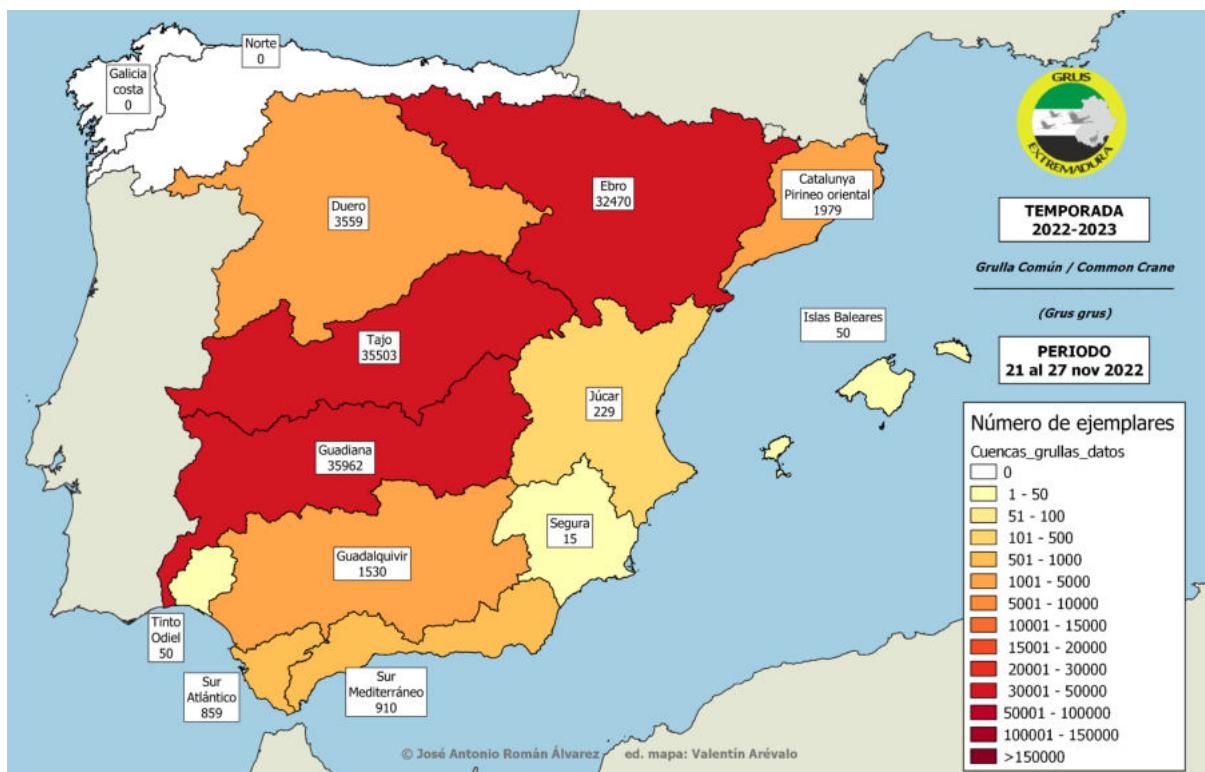
Liarte; 260 over Fuenlabrada (M) Paula González; 2 over Casarrubios de Monte (M) Unai Fuente; 600 at Castrejón reservoir (TO) Javier Nicolau; 4 over Arrocampo reservoir (CC) Antonio Méndez, Ángel L. Méndez; 12 at Palazuelo (CC) Yeray Seminario; 110 over Sevilla la Nueva (M) Mara Brans; 118 over Villalba de los Barros (BA) Juan G. Miranda; 1,500 at Los Canchales reservoir (BA) Vicent Esteller; Javi; 85 over Fombuena (Z) Conchi Esteban; 825 in dehesas, Los Pedroches (CO) Juanma Sánchez; 100 at Charcones de Miguel Esteban (TO) Francisco Morat; 100 over Guadalajara, José M^a Gómez; 4 in Llobregat delta (B) Gerard Viader, Narcís Puig, Sergio Hoces; 5 over Suerte de Gargüera (CC) Steve Hutchinson; 64 at Valdesalor (CC) Francis Martín; 255 over Cabanillas del Campo (GU) Fernando Gómez (DALMA); 156 over Golmago (SO) José L. Hernández; 49 in s'Albufera natural park, Mallorca (IB) Belén Landalte, Pachi Givini; 50 over Almazán (SO) Fernando Chaguaceda; 89 at Monteagudo de las Vicarías reservoir (SO) Fernando Chaguaceda, Gregorio Chaguaceda; 3 at Navarredonda reservoir, Zarza de Montánchez (CC) Raúl Granados; 270 over Villaconejos (M) Susana B.; 46 flying east at Chica lagoon, Villafranca (TO) and 12 at the lagoon, Carmen Comendador.

27/11/22: 676 leave the roost at Alange reservoir (BA) heading south-west, José A. Román; 25+34 over Valverde del Pardillo (M) Patricia Alonso; 20 over San Lorenzo del Escorial (M) Santi; 75 over Arévalo (AV) Arón Blázquez; 65 over Alcázar de San Juan lagoon (CR) Esther Murciano; 7 over Barcelona, Cristina Masquet; 8 at Casar de Cáceres reservoir (CC) Francis Martín; 37 over Sariñena lagoon (HU) Eduardo Gracia; 174 at Corral Rubio (AB) Julián Castaño; 15 at Villafranca lagoon (TO) Esther Murciano; 100 over Cijara reservoir (BA) Candy Valle; 100 over Tendilla (GU) Javi Calvo (DALMA); 260 over Boquiñeni (Z), 20 at Pedrola (Z) and 20 at Pozuelo de Aragón (Z) Eduardo Gil; 15 at Coria del Río (SE) Rafael Camino; 54 at Villar de Gallimazo (SA) Rafael Vicente; 2 at Castelló d'Empuries (GI) Feli Guardado; 120 over Barbens (LL) Francesc Pont; 15 over Bigues i Riells (B) Artur Morales; 15 over Vallgorguina (B) Gisela Boba; 100 at Sástago (Z) Pilar García, José L. García; 240 at La Janda lagoon (MA) Faustino Chamizo; 400 in the northern area of Doñana (SE) José Zarapico; 3 at El Hondo natural park (A) David Cañizares, Jon Clark; 3 in Almenara marsh (CS) Sara Pérez; 7 over Barcelona, Cristina Masgoret; 2 at Ivars lagoon (LL) Sergi Sales; 40 over Meco lagoon (M) Pedors Martinian 200 over Villaconejos (M) Susana B.; 29 over Valdebebas (M) Juan C. Hidalgo; 6 over El Pardo woods (M) García de los Ríos; 25 over Villaviciosa de Odón (M) Mark Davis; 12 over Navalcarnero (M) Unai Fuente; 120 over Toledo, Ángel Cano; 11 over Villafranca (TO) Julio García; 208 over El Gordo (TO) Helena Oliver; 961 roost at El Hoyo lagoon (AV) José M^a García, Arón Blázquez; 3,768 roost at Los Canchales reservoir (BA) José A. Román; 1,340 roost at Sotonera reservoir (HU) Silvia Duque, Esther Yera, Pablo Vallés, Francisco Quesada, Juan Muñoz.

33,625 are censused at Lac du Der (FR) LPO Champagne-Ardenne

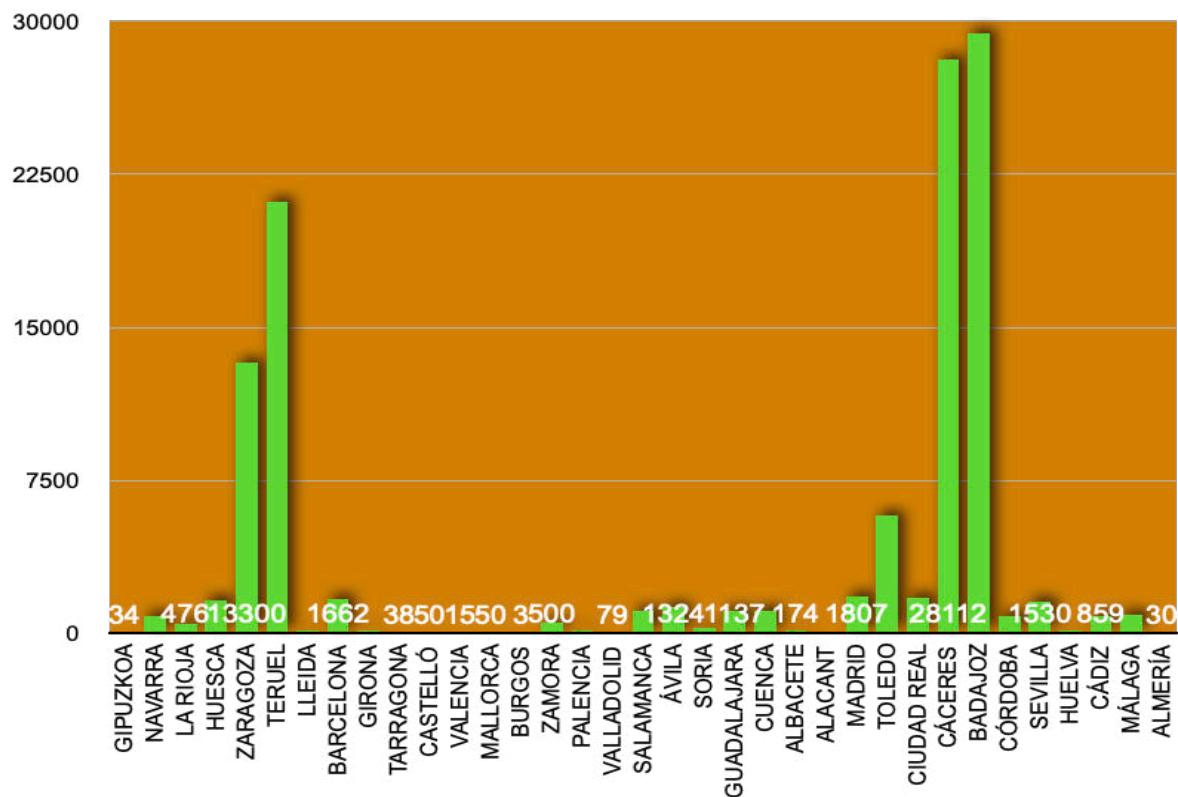


Map n° 19: Migration and distribution by provinces. November 21 to 27



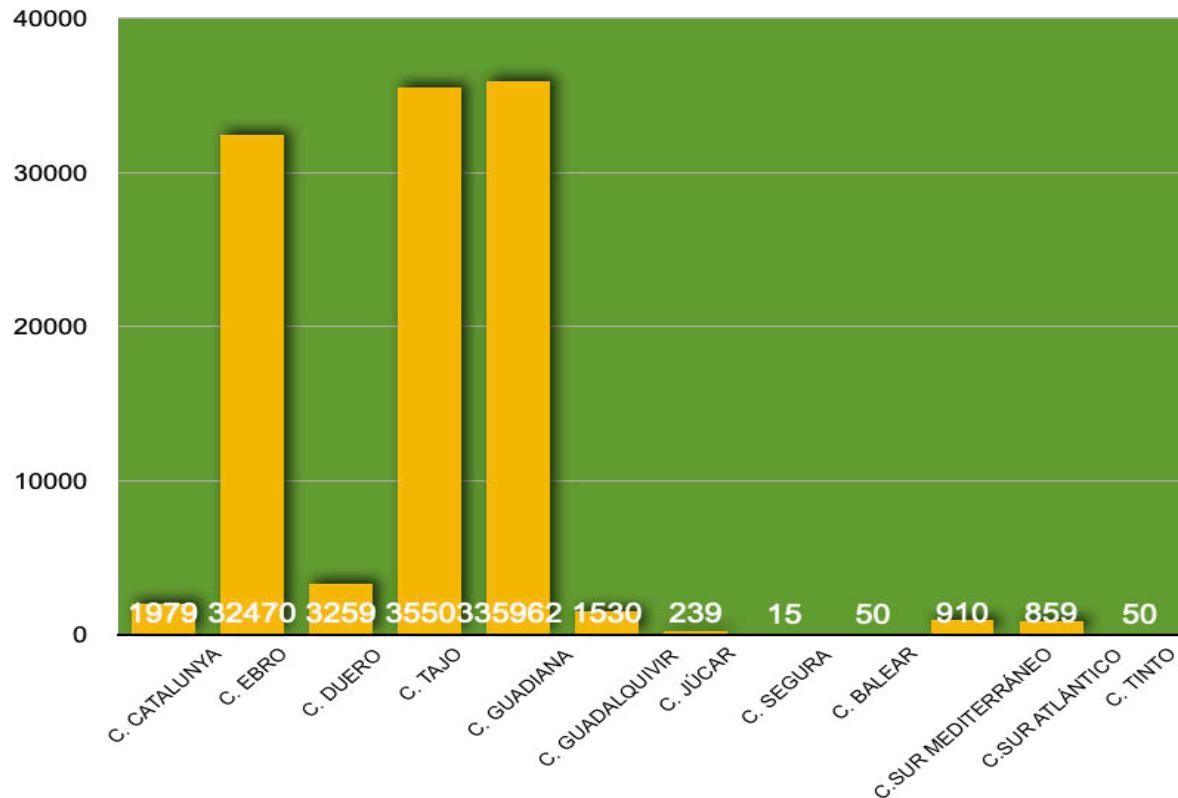
Map n° 20: Migration and distribution by catchment areas. November 21 to 27

Week of November 21 to 27



Graphic nº 13: Migration and distribution by provinces. November 21 to 27

Week of November 21 to 27



Graphic nº 14: Migration and distribution by provinces. November 21 to 27

Little migratory activity at the start of the week, but increasing intensity at the end of it.

28/11/22: Nocturnal passage over Toledo, José L. de la Cruz (ARDEIDAS); 150 over Ejea de los Caballeros (Z) María Berna; 7 at La Granjuela (CO) and 220 at Los Blázquez (CO) José Cañas; 230 at El Cañizar lagoon, Villarquemado (TE) and 20,000 at Gallocanta lagoon (TE/Z) Antonio Torrijo; 150 leave La Loteta reservoir (Z) Esther Murciano; 479 at Fuente de Piedra lagoon (MA) and 468 at Dulce lagoon, Campillos (MA) Javier Fregenal; 25 over Corral de Calatrava (CR); 105 over Barajas de Melo (CU) Pedro Bustamante; 233 at La Aldea del Obispo (CC) Neil Renwick.



Image nº 28: Cranes at Fuente de Piedra (MA). Photo: Javier Fregenal.

29/11/22: Nocturnal passage over Toledo, José L. de la Cruz (ARDEIDAS); 349 at Alcolea de Tajo (TO) and 20 at Calera y Chozas (TO) Marco Ansón; 28 at El Porvenir, Fuente Obejuna (CO) Marga Martín; 5 over Jerez de la Frontera (CA) Bruno Asensio; 7 over Villamartín (CA) Vicent Esteller; 50 over Almendralejo (BA) Luis Salguero; 1,876 at La Bazagona and 6,370 at Las Urdimalas, Malpartida de Plasencia (CC) Eva Garzón; 55 over Villaviciosa de Odón (M) and 77 over Sevilla La Nueva (M) Mara Brans; 7 over Toledo, Ángel Velasco; 100 over Alfaro (LR) Andrés de la Torre; 2 over Los Gaitanes gorge, Ardales (MA) Juan Ramírez, Adrián Martín; 67 over Utrera (SE) André Geelhoed; 112 over San Juan del Puerto (H) Juanjo Cipriano; 21 at El Pas reservoir (HU) Alberto Gasquet; 120 over Iratí Forest (NA) María Durán; 186 at Estanca de Escorón (Z) José M. Sánchez; 21 at Boada de Campos lagoon (P) José Mª Salazar; 271 roost at Santa Teresa reservoir (SA) Vega Bermejo; 50 over Agudo (CR) Raque Ramiro; 60 over Santa Coloma de Farners (GI) Alfons Delgado; passage at 21:13h over Sant Quim de Freixenet (LL) Daniel Espejo; 60 at Palancoso lagoon (CC) Vicente Risco.

30/11/22: Nocturnal passage over Toledo, José L. de la Cruz (ARDEIDAS); 2,380 roosted at Alange reservoir (BA) José A. Román; 80 over Villalba de los Barros reservoir (BA) Jose Leal; 61 over Chapinería (M) José Gallego; 40 over Erla (Z) María Berna; 1,081 roosted at Fuente de Piedra lagoon (MA) Javier Fregenal; 20 over Campo Real (M) María Berna; 50 over Echo (HU) Isabel Sanz; 155 over Cervera del Río Alhama (LR) Roberto Vega; 31 over Guadalajara, Juan J. Calvo; 165 roost in the saline lagoon, Sástago (Z) Daniel Enfedaque; 40 over Ventas Blancas (LR) Álvaro Sarriamán; 10 over Talavera de la Reina (TO) Antonio Alía (ARDEIDAS); 242 at Calera y Chozas (TO) at 155 at Oropesa and Lagartera (TO) Marco Ansón; 7 at Aznalcázar (SE) Daniel Oviedo; >2,000 over Villar del Olmo, Nuevo Baztán (M) since 17/11, Inés Bállega; heard at Semillas (GU) Mario (DALMA); 5 over El Torcal, Antequera (MA) Juan Ramírez; 89 over Los Blázquez (CO) Marga Martín; 350 at La Bazagona (CA) Gerardo Pizarro; 17 over Pedrezuela reservoir (M) Marcos Rodríguez; 350 at La Loteta reservoir (Z) Javier Traín; 49 at La Torre de Miguel Hambrán (TO) Óscar Frías; 177 at San Juan del Puerto (H) Francisco Rivas; 350 over Barbinzana (NA) Eugenio Montelio; 100 over Pamplona (NA) and 108 over Tafalla (NA) Juan I. Deán; 25 at Pitillas lagoon (NA) Haritz Sarasa; 42 at La Zolina reservoir (NA) Haritz Sarasa, Jesús Mª Lekuona; 9 over El Pardo (M) Jacob Owings; 30 over Soto Del Real (M) Francisco Molinero; heard over Soria, Sergio Pérez; 1 over Donostia/ San Sebastián (G) Jon Etxezarreza.



Image nº 29: cranes near Fuente de Piedra (MA). Photo: Javier Fregenal.

01/12/22: Nocturnal passage over Alfaro (LR) Cristina Martínez; also over Talavera de la Reina (TO) José L. de la Cruz (ARDEIDAS); heard at 01:00h over San Sebastián de los Reyes (M) Javier Mayado; 146 over Sevilla La Nueva (M) Mara Brans; 24 over Madrid, José M. Ruiz; 210 over Sigüenza (GU) Isabel & Fernando; 40 over Segovia, Rubén Ramos; 1,000 in Tablas de Daimiel National Park (CR) Kathryn James; 72 at Alcolea de Tajo ((TO) Marco Ansón; 4 at Salburua (AR) E.B.B.; 36 over Txingudi marsh, Irún (G) José F. Esparcia; Paul Ortuzar; 74 over Griñón (M) Mª Victoria Cabañas; heard at Semillas (GU) Mario (DALMA); 15 go from Las Cañas (NA) towards Logroño (LR) Javier Robres; 26 over Sotos

de Alfaro (LR) Jesús Ucha; 2 at La Zolina reservoir (NA) Cuevas Ruiz; 9 at San Pedro reservoir, El Porvenir (CO) Francisco J. López; 8 over Arrocampo reservoir (CC) Steve Hutchinson; 30 over Navalmoral de la Mata (CC) Vicente Risco; 292 at Rosarito reservoir (AV) David García; 380 at Manjavacas lagoon (CU) Jaci Mendoza; 525 at Santed reservoir (Z) Francisco J. Sampietro; heard over Villanueva del Pardillo (M) Patricia Alonso; 20 over Madrid, Juan C. Paniagua; 27 over Trujillo (CC) Carmen Pérez-Aloe; 600 at La Janda (CA) Juan Rodríguez; 80 at Coria del Río (SE) Mario Martín, Fernando del Valle, José A. Lama, Paco Chiclana; 16 over Plasencia (CC) Marco A. Sánchez; 50 over Jaraiz de la Vera (CC) Marián López, Ángel L. Méndez; 10 over La Calzada de Bejar (SA) Fernando Aranguren; 65 over Monteagudo (NA) Gorka Gorospe; 33 over Madrid, Christophe Pontegnie; 26 over El Retiro (M) Ángel L. Neila; 20 over Leganés (M) Javier Paricio, García de los Ríos; 41 over Fuenlabrada (M) Félix Arribas, Ricardo Rodriguez; 34 over Ajalvir (M) David Valcárcel; 30 over La Pedrezuela reservoir (M) David García; 5 over Calzada de Tera (Z) Juan J. González; 31 over Pinto (M) José Mª de la Peña; 242 in Villafáfila nature reserve (ZA) Noreia Fernández, José Mª San Román; 14 at Ejea de Los Caballeros (Z) José M. Sánchez; 82 at Laverné reservoir (Z) José M. Sánchez; 200 over Garralda (NA) Miguel Minondo; 100 in Brazo del Este (SE) Paco Chiclana; 200 at El Taray lagoon (TO) Leo González; 7 at Torreorgaz (CC) and 22 at Valdesalor reservoir (CC) Francis Martín; 14 over Cabañas del Castillo (CC) Laura Rollán; 10 over Moscardón (TE) José A. Beneito; 6 at Jerte reservoir (CC) Javier Prieta; 15,366 are censused at Gallocanta lagoon (TE/Z) S.A.R.G.A.; 1,181 go to roost at El Hoyo lagoon (AV) César San Segundo; 106 roost at Santa Teresa reservoir (SA) Vicente G. Garrudo; >1,000 go to roost at Gargáligas reservoir (BA) Ángel López; group at 20:00h over Alfaro (LR) Miguel Martínez.



Image nº 30: Migrating flock over Navarra. Photo: Jesús M. Lekuona

02/12/22: Nocturnal passage over Alfaro (LR) Miguel Martínez; 2,611 leave Alange reservoir (BA) José A. Román; 218 roosted in the River Tinto (H) José M. Méndez; 37 over Toledo, Ángel Velasco; 540 at Aldeaseca and Magazo (AV) Víctor Coello; 12 over Atienza (GU) Joaquín (DALMA); 19 over Cercedilla (M) Alberto Pantoja; 15 over Madrid, Juan C. Paniagua; heard at Yebes (GU) Alfonso; intense migration passage over Pamplona (NA) Jesús Mari Lekuona; 21 over Chapinería (M) José Gallego; 300 at Valdesequera (BA) José L. Vinagre; 61 over Utrera (SE) Vicent Esteller; 126 at Alcollarín (CC) Roly Pitts; 7 at La Cumbre (CC) Rob Williams; 37 over Cabañas del Castillo (CC) Laura Rollán; 74 at Lagartera (TO) César Clemente; 13 over Guadarrama (M) Luis Redondo; 13 over Madrid, Jorge García, Peter Swinden, García de los Ríos; 46 over Pinseque (Z) Jesús Rodríguez; 35 over Zaragoza, Elena Cantalapiedra; 550 at La Zolina reservoir (NA) Gonzaga Santesteban; 225 in dehesas, Hinojosa del Duque (CO) and 200 at La Colada reservoir (CO) José Cañas; 24 over Fuenlabrada (M) Ángel Arellano; 50 at Bádenas (TE) Diana Osuna; 144 over Sevilla la Nueva (M) Mara Brans; 80 over Cantalojas (GU) and heard at Campisábalos (GU) Joaquín (DALMA); 28 between Berzocana and Garciaz (CC) Neil Renwick; 1 at Lange (CT) Manuel Hernández; 40 over Marchamalo (GU) and 45 over Cabanillas del Campo (GU) Rubén Ramos; 1,000 in Tablas de Daimiel National Park (CR) and 15 at Navaseca lagoon (CR) Miguel A. Leiva; 2 over Meco (M) Rubén Ramos; 7 at Castelló d' Empuries (GI) María Janoher; 300 over Muriel de la Fuente (SO) and 100 over Calatañazor (SO) Virginia Marco; 50 over Santa Cruz de Yanguas (SO) Eduardo Alfaro; 65 over Ribarredonda (GU) Rodri G. Vegas; 32 over Madrid, Rafa Al; 400 over Pantoja (TO) Mª José M. Cenamor; 18 over Novés (TO) Cristina Gómez; 18 at Manjavacas lagoon (CU) Andrés Pinedo; 28 at Alcázar de San Juan lagoon and 22 at Navaseca lagoon (CR) Pedro Bustamante; 20 at Cabeza del Buey (BA) and 6 at the River Guadalemar, La Serena reservoir (BA) Gonzalo Astete; 700 at Casa de Hitos, Madrigalejo (CC), 200 at Sierra Brava reservoir (CC) and 90 at Madrigalejo (CC) Fátima Romero, Raúl Granados; 23 at Morantes reservoir, La Roca de la Sierra (BA) José L. Bautista; 318 at Los Canchales reservoir (BA) José Mª Benítez; 9 at Castellanos de Zapardiel (AV) Víctor Coello; 10 over Bonhabal stream, Almendralejo (BA) Francisco Macías; 11 over Rincón de Ballesteros (CC) Francis Martín; heard at Hernani (G) Julen Vega; 430 in Villafáfila nature reserve (ZA) João Tomás; 30 over Villalbilla (M) Paula Fernández; 450 at Monreal reservoir (NA) Jorge Nubla; 850 over Arizcun (NA) José L. Lizarza; 110 over Galilea (LR) Pedro Sáenz; 25 at El Hito lagoon (CU) Luis O. Carretero; 1,130 go to roost at El Hoyo lagoon (AV) Alfonso Guío, Miguel Martín; nocturnal passage over Hernani (G) at 19:00h Julen Vega; 2,859 go to roost at Alange reservoir (BA) José A. Román; small flock at 23:00h over Collado Mediano (M) Adolfo Rodríguez (GOEP).





Image nº 31: Crane at Lange (CT). Photo: Manuel Hernández.

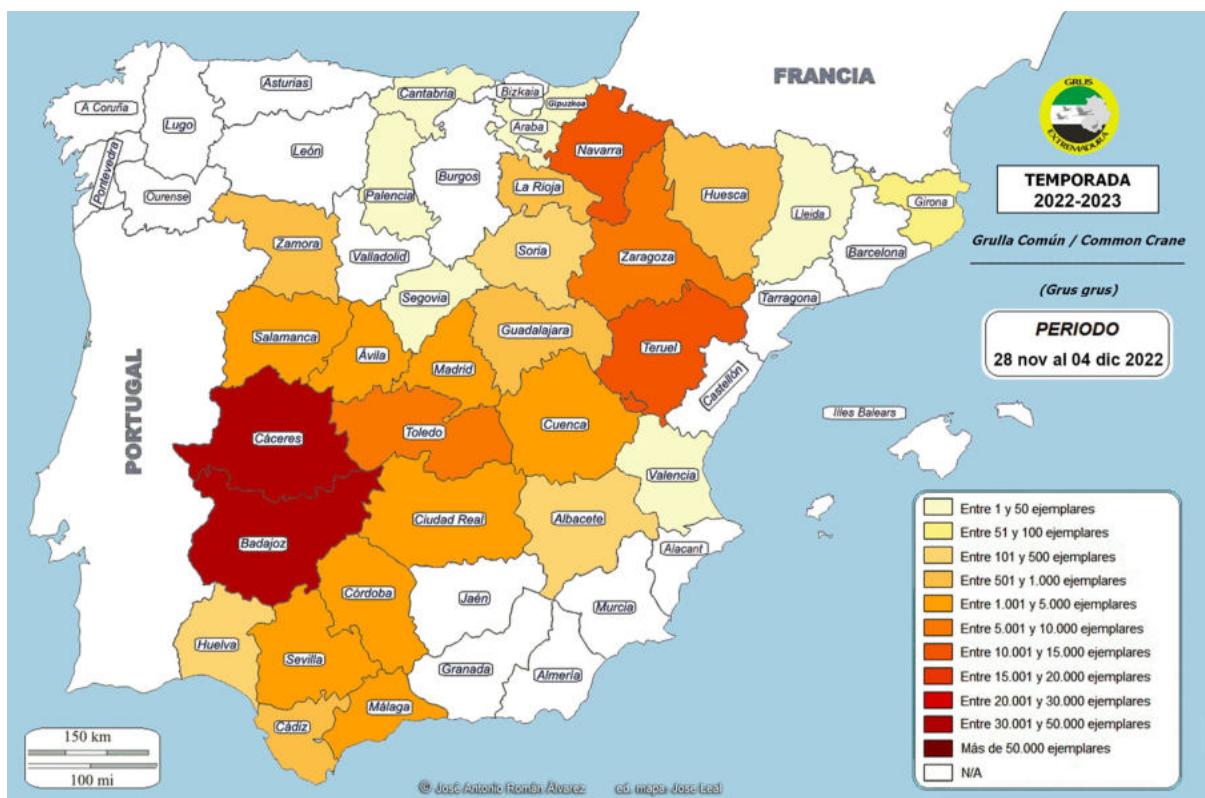
03/11/22: small flock over Guadalajara, Juan José (DALMA); 58 at 08:39h over Villanueva del Pardillo (M) Patricia Alonso; 10 over Talavera de la Reina (TO) José L. de la Cruz; 150 feeding between Capilla (BA) and Chillón (CR) Encarnación Baez; >1,000 at Aldea de Cuenca (CO) Miguel Corvillo; 550 feeding at Bujaraloz (Z) and 50 over Zaragoza, Conchi Esteban; heard over Txingudi, Irún (G) José F. Esparcia; 10 over the Sierra de la Mosca (CC) Carmen Conde; 13 over Jerez de la Frontera (CA) Bruno Asensio; 70 in Brazo del Este (SE) Rafa Benjumea; 538 at Pinsoro (Z) Luis Gracia; 52 at Loza reservoir (NA) Gaspar Zaldua; 5 at Las Cañas reservoir (NA); 60 over Trillo (GU) Sofía García; 3 over Pedrezuela reservoir (M) Robert Wilson; 14 over Valmayor reservoir (M) Eduardo Blanco; 20 over Valdebebas (M) Beatriz Martín; 7 at Campillos lagoon (M) Enrique Villaespesa; 28 over Soto de las Juntas (M) Vicente López; 6 over Villaviciosa de Osón (M) Mark Davis; heard at Griñón (M) and 27 over Aranjuez (M) David Guillén; 73 over Algodor (M) Susana B.; 300 at Larga lagoon, Villafranca (TO) Sergio O. Pinedo; 1 over Montánchez (CC) and 155 at La Cumbre (CC) Seppo Hjerpe; 155 at Campazo pool (CC) Neil Renwick; 14 over Trujillo (CC) Carmen Pérez-Aloe; 27 over the River Ayuela (CC) Francis Martín; 150 at Zarza de Granadilla (CC) Vicente Torres; 25 at La Fresnedilla pool (CC) and 8 in dehesa, Villar de Plasencia (CC) Jorge Martínez; 2 at Aldehuela de Yeltes (SA) Guillermo Risco; 400 at Vega del Haza, Malpartida de Plasencia (CC) José Mª Jiménez; 14 at La Pueblanueva (TO) Pedro Vázquez; 10 in Cambrillos de Guadarrama gravel works (TO) Jorge García; 52 over Camarena (TO) Unai Fuente; 3 in Francos gravel works (SA) Miguel Rodríguez; 8 at Sancti Spiritus (SA) Antonio Ceballos; 28 over Berzocana (CC) Paul Brugman; 23 at Las Cabezas de San Juan (SE) Juan Rodríguez; 959 at El Cañizar lagoon, Villarquemado (TE) Irene M.

Arnaldos; 2 over Madrid, Mara Brans; 1 at Ribamontán al Mar (CT) María Diaz, Jesús Menéndez; birds arrive at 20:34h, Gallocanta lagoon (TE/Z) Carmina Franco.

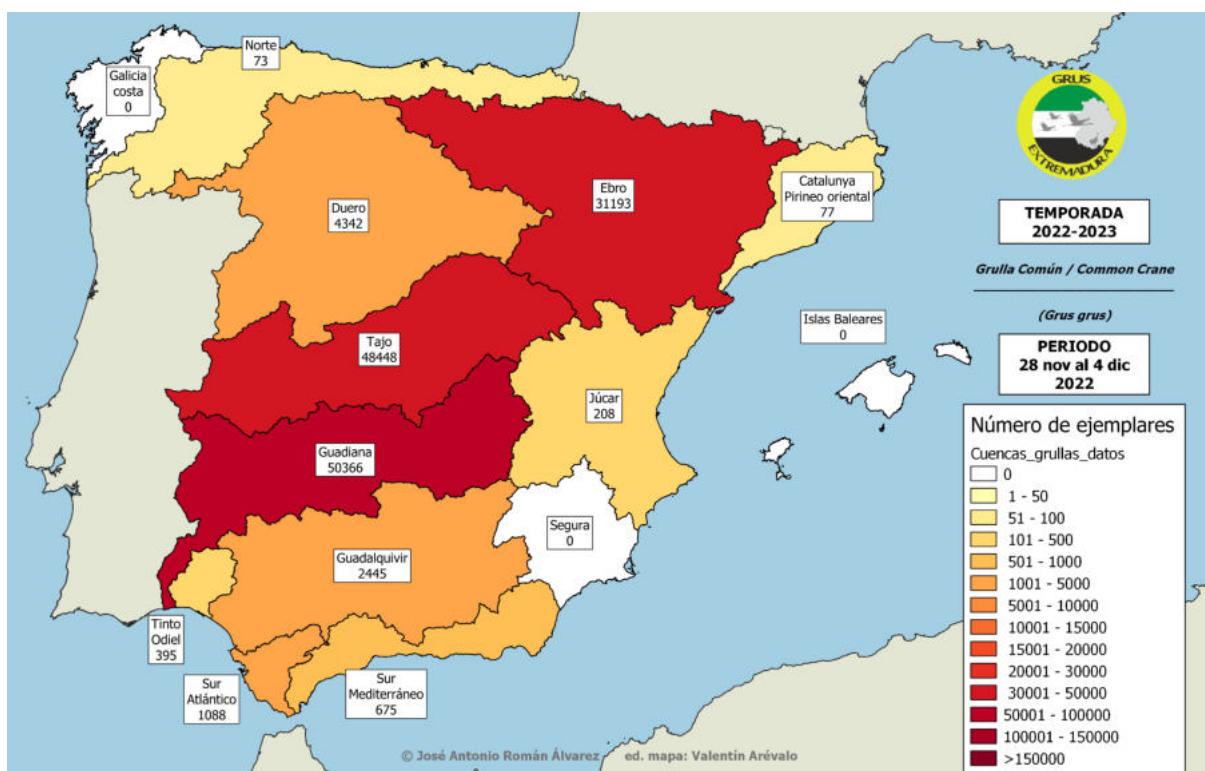
04/12/22: 3,600 roosted at Peña Hueca and Taray lagoons (TO) Ángel Velasco; 208 at Pétrola (AB) Marcelo Quesada; 102 over Huesca, Francisco Quesada; 90 over Alfaro (LR) Cristina Martínez; 48 over the River Jubera (LR) Álvaro Sarramián; 58 over Retuerta del Bullaque (CR) Gerardo García; 19 at Las Fitas reservoir (HU) Victoria Torrente, Jesús Lavedán; 36 over Cornalvo reservoir (BA) Elvira del Viejo; 115 over San Lorenzo de Flúmen (HU), 90 at Sariñena lagoon (HU) and 55 in rice fields at Capdesaso (HU) Eduardo Gracia; 152 at Almudévar (HU) and 650 at Sotonera reservoir (HU) Jorge Lardiés; heard at Gorraiz (NA) Ángel Larumbe; heard in Baztán valley (NA); 12 at Longar lagoon (TO) Diego Llorente; 100 at Valdecañas reservoir, El Gordo (CC) and 4 at Lugar Nuevo pool (CC) Vicente Risco; 30 at Ahigal reservoir (CC) Juan C. Paniagua; 6 circling at Las Cañas (NA) Carmelo Martínez; 11 over Logroño (LR) Javier Nalda; 63 at Cubillana (BA) Raúl Pérez; 600 at Villarreal (BA) and 125 in El Romo dehesa, Valverde de Leganés (BA) Jose Leal; 57 over Almadrones (GU) Javi Calvo (DALMA); 994 go to roost at El Hoyo lagoon (AV) Arón Blázquez; group over Cantalojas (GU) Joaquín (DALMA).



Image nº 32: Cranes near Gallocanta lagoon (TE/Z). Photo: Pilar Edo.

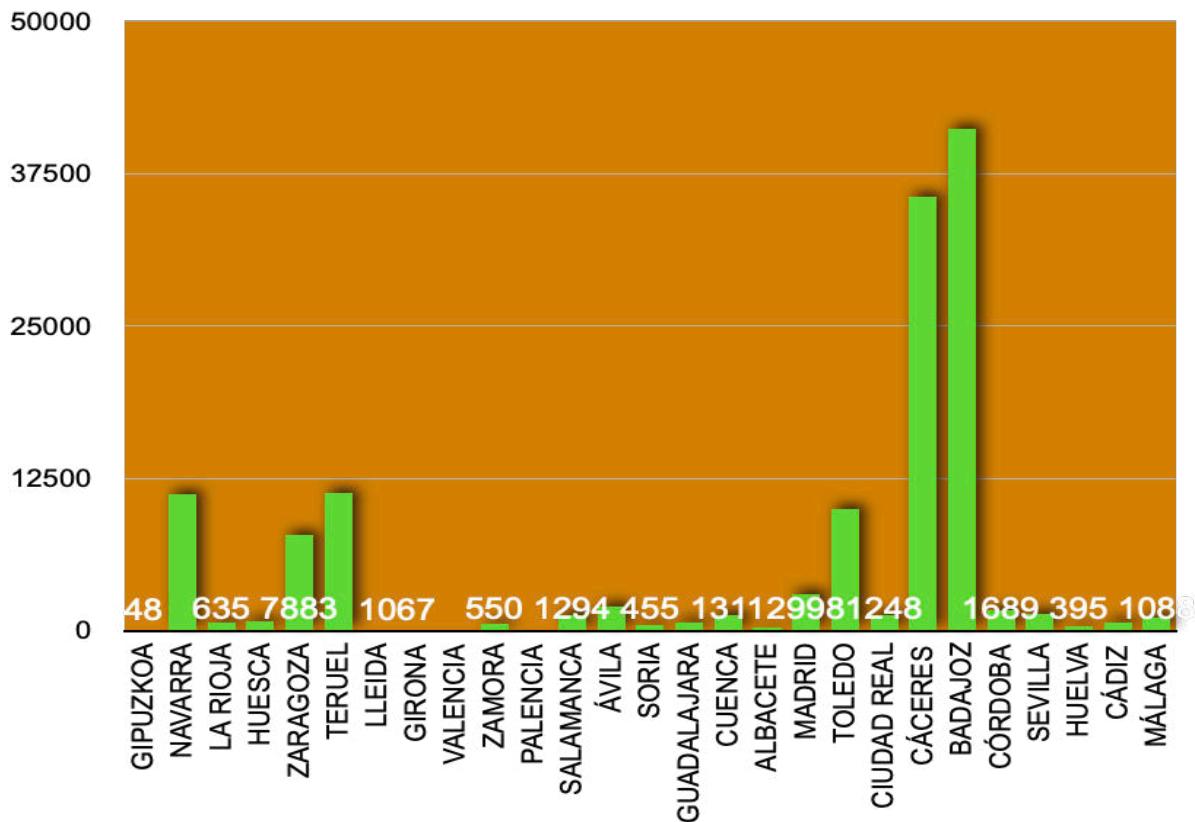


Map n° 21: Distribution and migration by provinces, November 28 to December 4



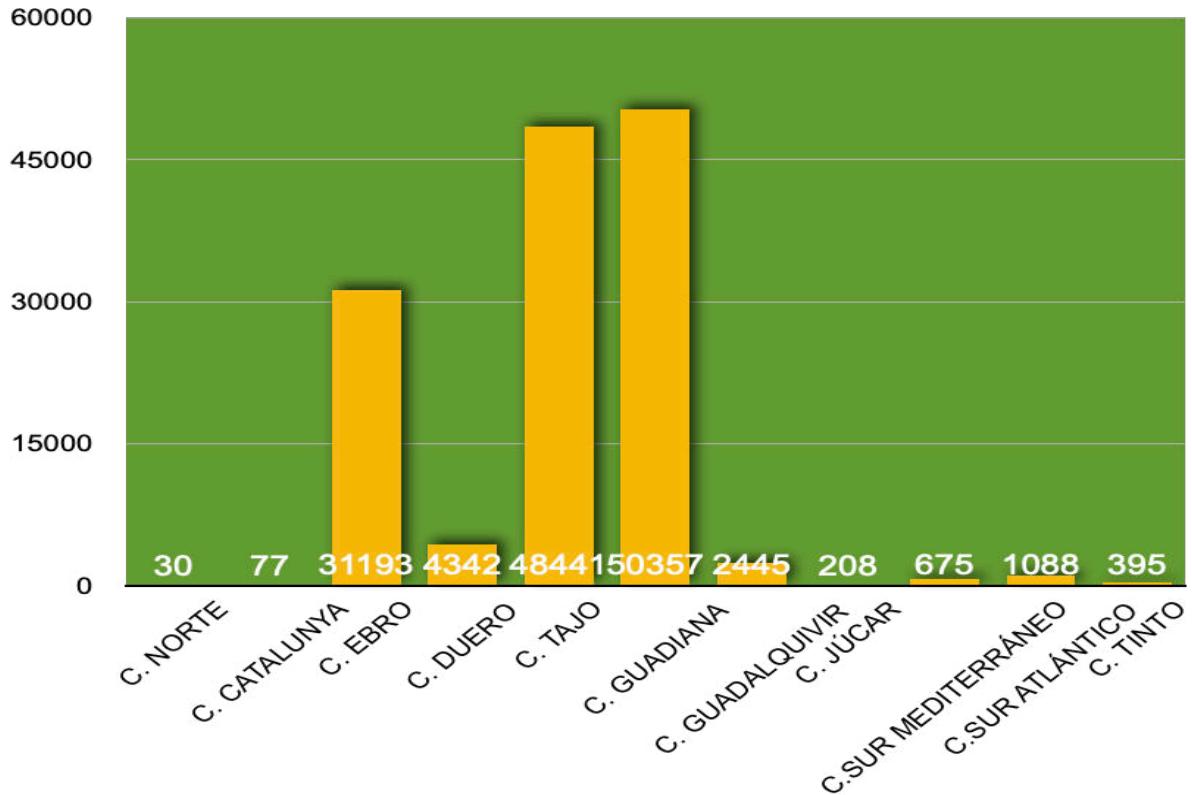
Map n° 22: Distribution and migration by catchment areas. November 28 to December 4

Week November 28 to December 4



Graphic nº 15: Distribution and migration by provinces, November 28 to December 4

Week November 28 to December 4



Graphic nº16: Distribution and migration by catchment areas. November 28 to December 4

A week of spreading out through the wintering areas, with new arrivals in the last few days, although this couldn't be adequately documented because of the rainy weather fronts that crossed the Peninsula.

05/12/22: 34 at Vadanco (TO) Yolanda García; 4 at Llano de Olmedo (VA) Fernando T. Rico; 2 at Baza (GR) Juan A. Dengra; 3 over Miajadas (CC) Mariano Cabrero; 10 over Torija del Campo (TO) Pilar Fernández; group over Semillas (GU) Mario (DALMA); 30 over Cantalojas (GU) Joaquin (DALMA); 32 in the rain over Toledo, Ángel Velasco; 17 over Sanchinarro (M) María Cano; 4 at Almonacid del Marquesado (CU) Magdalena Luque; 60 over Monreal (NA) Almudena García; 3 over Salburua (AR) Luis Lobo; 3 at La Roca de la Sierra and 18 in dehesas, Morante (BA) Arturo Pérez; 6 at Tablillas del Záncara (CR) Pedro Bustamante; 350 at El Taray lagoon (TO) Javier Gómez; 3 at Pedrezuela reservoir (M) Alex de Dios, Juan C. Hidalgo, Robert Wilson; 1,000 at El Cañizar lagoon (TE) Jon Iratzagorria; 2 over Los Galachos de la Alfranca (Z) José M Sanchez; 5 at La Zolina reservoir (NA) Raúl Pascual; heard at Campisábalos (GU) Joaquin (DALMA) at 19:42h; 3 at Hondo de Amorós (A) Sergio Arroyo; 196 over Txingudi marshes (G) Julen Vega; 768 at Belalcázar (CO) Pedro A. García, Juanma Sánchez.

19,436 are censused at Arjuzanx (FR) Sophie Laugareil et al



Image nº 33: Pair of cranes at Baza (GR). Photo: Juan A. Dengra

06/12/22: 48 over Santo Domingo (LR) Óscar Zuazo; 2 in Trebujena marshes (CA) Juanpe Torres; 132 in dehesas, Aldea del Cano (CC) Luis Asuar, José A. Román; 40 over Ainzón (Z) Irene Marina; 600 at Palomas (BA) Jose Leal; 8 over Jarandilla (CC) Sofía Moreno; 28+22 over Madrid, Angel Velasco; 850 at the roost at Alera, Figarol (Z/NA) Rajen Ayerra; 82 over Rueda de Jalón (Z) Eduardo Gil; 80 over Alarcia (BU) Roberto Calleja; 60 over Quintanilla del Agua (BU) Israel Yáñez; 50 over Miranda de Ebro (BU) Montserrat Valdés, Roberto Calleja; 6 over Moriana (BU) David Martinez, Gema Ruiz; 60 at Tablillas del Záncara (CR) Alberto Cánovas; 88 at Manjavacas lagoon (CU) Pedro Bustamante; 24 at Camino de Villafranca lagoon (CR) Manuel Nieto; 185 at El Taray lagoon (TO) Javier Gómez; 55 over San Pablo de los Montes (CR) Javier Nicolau; 15+20 over Leganés (M) Mario Liarte, Rafa Al; 24 over Valdebebas (M) Manuel Vega; 21 over the Botanical Gardens, Madrid, Melissa Parella; 17 over the River Manzanares (M) Robert Swinden; 29 at Santillana reservoir (M) Beatriz Bermejo; 6 over Cervera de Buitrago (M) Daniel Gaona; 8 over La Iglesuela (TO) Amparo Moreno; 120 over Garagüeta nature reserve (SO) Juan P. del Álamo; 1,000 at Monreal del Campo (TE) and 1,000 at Gallur (Z) David Cantalejo; 108 at Sariñena lagoon (HU) Jorge Lardiés; 42 at Las Fitas reservoir (HU) and 33 at Capdesaso (HU) Silvia Duque, Esther Yera, Francisco Quesada; 3 at Aiguamolls de l'Empordà (GI) Francesc Farriols, Josep Crusafont; 80 at Villavete reservoir, Lónguida (NA) Gonzaga Santesteban; 400 at Fuente de Piedra lagoon (MA) Carmen Gutiérrez; 35 over Madrid, Arantza Leal; 4 over Cabanas de Bergantiños (C) José L. Rabuñal, Pablo Lado; 2,500 at Riolobos weir (SA) Antonio Ceballos; 26 over Soto del Real (M) García de los Ríos; 16 over El Escorial (M) Edmundo Bell; 17 over Madrid, Daniel Izquierdo; 421 at Belalcázar (CO) Pedro A. García, Juanma Sánchez; 11 over Constantina (SE) Rafa Vicente; 9 over Olsón (HU) Jan Verhoeven; 2 at Guadiloba reservoir (CC) Antonio Méndez, Ángel L. Méndez; 14 at Sando (SA) Miguel Martín; 20 at La Nava lagoon (P) Antonio Gil; 4,200 go to roost at Manjavacas lagoon (CU) Fernando Alonso; 1,014 go to roost at El Hoyo lagoon (AV) Cruz González, Arón Blázquez, José Mª García; heard at 19:32h at Campisábalos (GU) Joaquín (DALMA) and also at Yebes (GU) at 19:53h, Alfredo.

07/12/22: 1 over the River Guadalhorce, Campanillas (MA) Luis Armario; 510 feeding at Bujaraloz (Z) Arnau Guardia; 1,500 at La Janda lagoon (CA) Bryan Murray; 256 at Ejea de los Caballeros (Z) José M. Sánchez; 200 at Loza reservoir (NA) Raúl Fernández; 250 at Revellinas (ZA) Fernando Jubete Guzón; 1 at the River Bullaque (CR) Jorge Sereno; 87 at Dehesón del Roble, Oropesa (TO) César Clemente; 200 over the river at Cinca (HU) Alejandro; 107 at El Verdugal, Oropesa (TO) José L. de la Cruz (ARDEIDAS); 78 over Alfaro (LR) Michel Marín, F. Cirac; 949 roost at Sástago (Z) Arnau Guardia; 50 over Alfaro (LR) Óscar Ruiz; 65 at the Marinejo reservoir (CC) Seppo Hjerpe; 750 at Castrejón reservoir (TO) Javier González; 21 at the River Guadalupejo (CC) Jorge Ángel; heard at Aler (HU) José L. Cortés; 33 over Madrid, Rafa Al; 9 over Cedillo de la Torre (SG) Chemi Ibáñez, Fernando Ávila; 15,883 are censused at Gallocanta lagoon (TE/Z) S.A.R.G.A.

08/12/22: Group over Toledo at 01:05h, Ángel Velasco; 138 at Pétrola (AB) Marcelo Quesada; 22 over Txingudi (G) Juan Arizaga, José F. Esparcia; 2 at Esteros de Manego (CA) Juan M. Bermúdez; 70 at Campazo pond (CC) Neil Renwick; 19 over Alía (CC) Jorge Ángel; 390 at Pitillas lagoon (NA) Pedro Arratibel; 42 over Txingudi marshes (G) María Bueno, Alberto Laiz; 38 over Estavillo (AR) Manuela Rodríguez; 88 over the Sierra de Isco (NA) Jesús Mari Lekuona; 550 in dehesas, Los Pedroches (CO) Juanma Sánchez; 4 over El Gordo (CC) José Mª Rojo; 52 in Brazo del Este (SE) Joaquín Vázquez; 5 at Portaje reservoir (CC) Raúl Granados; 3 over Coria (CC) José L. Vázquez; 7 over Txingudi marshes (G) Itziar Gutiérrez, Martín Larrañaga; 25 at El Burgo de Ebro (Z) Deidre Asbjorn; 16 at Alcázar de San Juan (CR) Virgilio Beltrán.



Image n° 34 : Cranes at Pétrola (AB). Photo: Marcelo Quesada.

09/12/22: 1,226 leave the roost at Fuente de Piedra (MA) Javier Fregenal; 82 at La Albuera lagoon (BA) Jose Leal; 51 over Mediano de Cervera (LR) R. Vega, E. Villa, Michel Marín; 2,000 between Cellà and Santa Eulalia (TE) David Mansilla; 22 over Guadalajara, Juan J. Calvo (DALMA); 4 at Aiguamolls de l'Empordà (GI) Antoni Mariné, Oriol Cabrero, Marleen Veramme, Norbert Willoert; 9 at Sant Jaume d'Enveja (T) Xesco Puigdomenech; 85 at Pitillas lagoon (NA) Raúl Pascual; heard at Calahorra (LR) Jesús Ucha; 9 over Cerbón (SO) Juan L. Hernández; 122 over Cervera (NA) Gorka Gorospe; 21 over Alfaro (LR) Michel Marín; 17 in the Llobregat Delta (B) Mireia Pintado, Ferrán López ; 400 at Dulce lagoon, Campillos (MA) Javier Fregenal; 400 over Tierga (Z) Jesús Hernández; 60 over Orisain (NA); 1,200 over Oloriz (NA) Miguel A. Pinto; 161 at La Nava lagoon (P) Mario Alonso; 2 at Cuerda del Pozo reservoir (SO) Juan L. Hernández; 4 in Sueca marsh, L'Albufera natural park (V) Adolfo Torres; 50 over Ugena (TO) Mercedes Panes; 143 at the roost, Santa Teresa (SA) Vicente G. Garrudo.

10/12/22: 1,443 roosted at Fuente de Piedra lagoon (MA) Florent Prunier; 4,000 set off on migration from Gallocanta lagoon (TE/Z) Antonio Torrijo; >388 over Daroca (Z) Pilar Edo; 42 between Morazoleja and Marazuela (SG) Gonzalo Criado; 215 at Peñalba (HU) Arnau Guardia; 27 over Ejea de los Caballeros (Z) Javier López; 7 at La Veguilla lagoon, Alcázar de San Juan (CR) Jesús Porrero; 215 over Ricla (Z) and 194 over Morata de Jalón (Z) Francisco J. Sampietro; 45 over Zaragoza, Félix; 20 over Fuentidueña de Tajo (M) Adolfo Rodríguez (GOEP); 6 over Sangancia (SG) Gonzalo Criado; 58 at Santa María de los Llanos (CU) Antonio Paredes; 78 over Movera (Z) José L. Rivas; 75 over Guadalajara, Fernando Canalejas (DALMA); 65 circling over Cabanillas del Campo (GU) Fernando Gómez (DALMA); 400 over Bujaraloz (Z) and 200 feeding in the area, Conchi Esteban; 89 over

Cornago (LR) Roberto Vega; 202 over Soto Gutiérrez (M) Juan C. Paniagua; 70 at Dehesa de Pilas (SE): 100 at Caracoles, Doñana National Park (SE) and 70 at Huerta Tejada, Doñana National Park (SE) Francisco J. Salcedo; 700 at Hato Blanco (SE) and 80 at Aznalcázar (SE) Juan Ramírez, Antonio Román; 4 at El Hondo (A) Juan A. Fernández, Iker Fernández; 9 over Zaragoza, Alfredo Sánchez; 250 at Ejea de los Caballeros (Z) Belén Cano; 38 at La Zolina reservoir (NA) Raúl Fernández; 47 over Berriozar (NA) José Ardaiz; 120 over Pamplona (NA) Teresa Subiza; 168 at Loza reservoir (NA) Gaspar Zaldivar; 6 at Boada de Campos lagoon (P) Mario Alonso; 25 over Guadalajara, Sergio López; 165 over Calatayud (Z) Ángel Gonzalo; 118 over Rivas Vaciamadrid (M) Octavio Infante; 2 at La Pedrezuela reservoir, Guadalix de la Sierra (M) Fernando Alonso; 76 over Chamartín (M) Iñaki Busturia; 40 over Barajas (M) Elena Baonza; 40 over Aravaca (M) CCZ; 36 over La Casa de Campo (M) Pedro Bustamante; 100 over Villaviciosa de Odón (M) José L. Machuca, Mª José M. Cenamor; 2 over Leganés (M) Pedro González, Amparo Moreno, Mario Vargas; 120 at El Rincón reservoir (AV) Alfonso Guió; 100 at El Grullo lagoon, Calzada de Oropesa (TO) and 100 in Lagartera plains (TO) César Clemente; 21 in dehesas, Casas de Don Antonio (CC) José Mª Rojo; 5 over Torrejón reservoir (CC) Ángel L. Méndez; 14 at La Fresnedilla pond (CC) Hugo Sánchez; 1,000 at Moraleja (CC) JuanMa Jiménez; 1 at Covachuelos (SG) Antonio Fernández; 14 at Valdesalor reservoir (CC) Francis Martín; 34 at La Aldea del Obispo (CC) Neil Renwick; 10 at Lácara (BA) Arturo Pérez; 95 over Calahorra (LR) Michel Marín; 149 over Cabanillas del Campo (GU) Javier Mª Gómez (DALMA); 84 over Sevilla la Nueva (M) and 2 over Leganés (M) Mara Brans; 80 over Aldea del Fresno (M) Rubí B.; 76 over Madrid, Joaquín; 18 at Villalpando (ZA); 18 over Astún (HU) Paula A.V.; 73 over Madrid, Irene; 2,000 at El Taray lagoon (TO) Ángel Velasco; 120 over Bartzán (NA) Xabier Etxarri; 5 in Sueca marsh, L'Albufera natural park (V) Andrés Balfagón, Joan Balfagón, Julio Cerveró, Biel Miquel; heard at Santa María del Berrocal (AV) Javier Prieta; 150 at La Bazagona (CC) and 65 at Cazalegas (TO) Sergio Mayordomo; 750 at Castrejón reservoir (TO) Javier Nicolau; 140 over Aranjuez (M) Daniel Izquierdo; 80 over Velilla de San Antonio lagoon (M) Bruno García, Mario Liarte; 200 over Sotos de Alfaro (LR); 25 over Valdelcubo (GU) Sergio Pérez; 21 at Guaza de Campos (P) Bruno Kovács; 335 at Pareja weir (GU) Mayte Samblas; 900 roost at El Hoyo lagoon (AV) Arón Blázquez; 440 roost at Santa Teresa reservoir (SA) Vicente G. Garrudo; 2,350 roost at La Alberca de Alboré reservoir, Sotonera (HU) Pablo Vallés; group at 19:07h over Galápagos (GU) Javi Rejos; groups arriving at Gallocanta lagoon (TE/Z) at 19:27h Antonio Torrijo; heard over Guadalajara at 20:15h, Mario (DALMA).

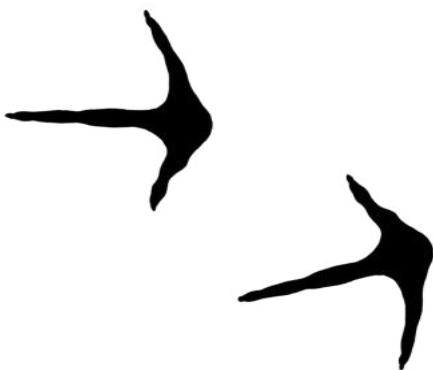
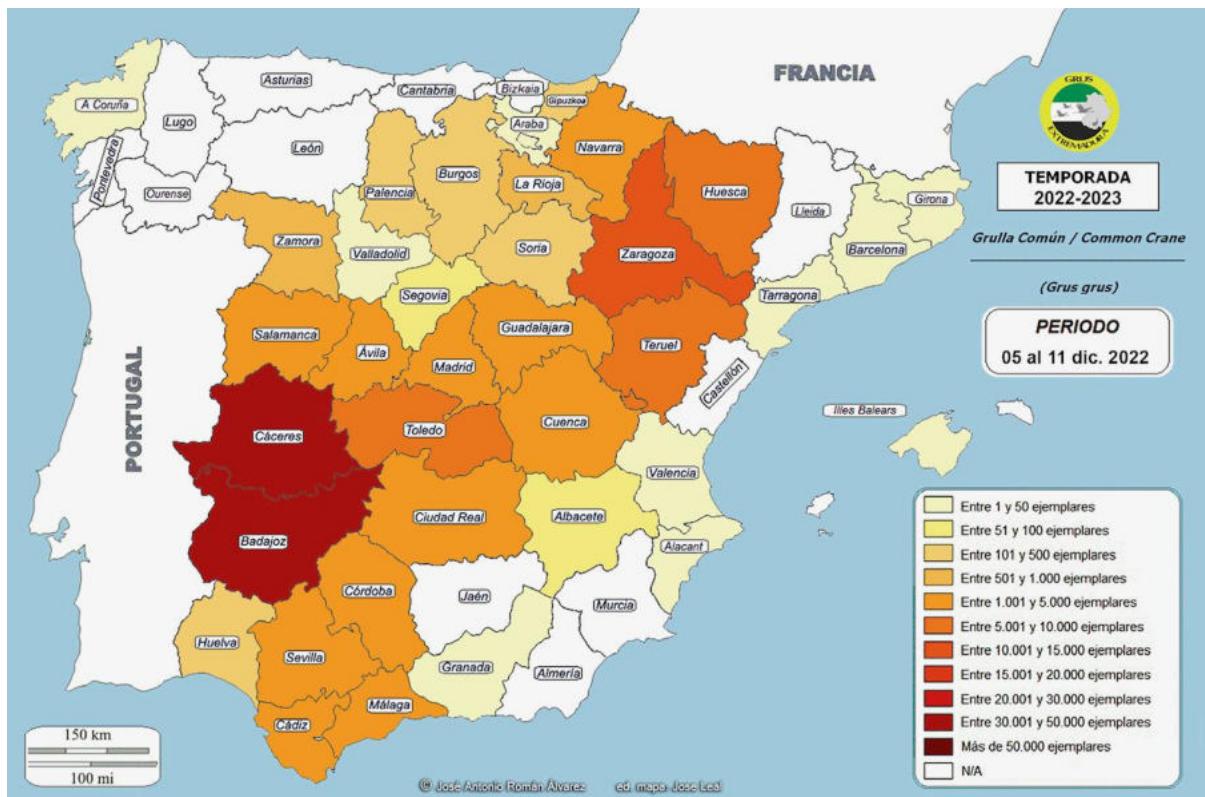


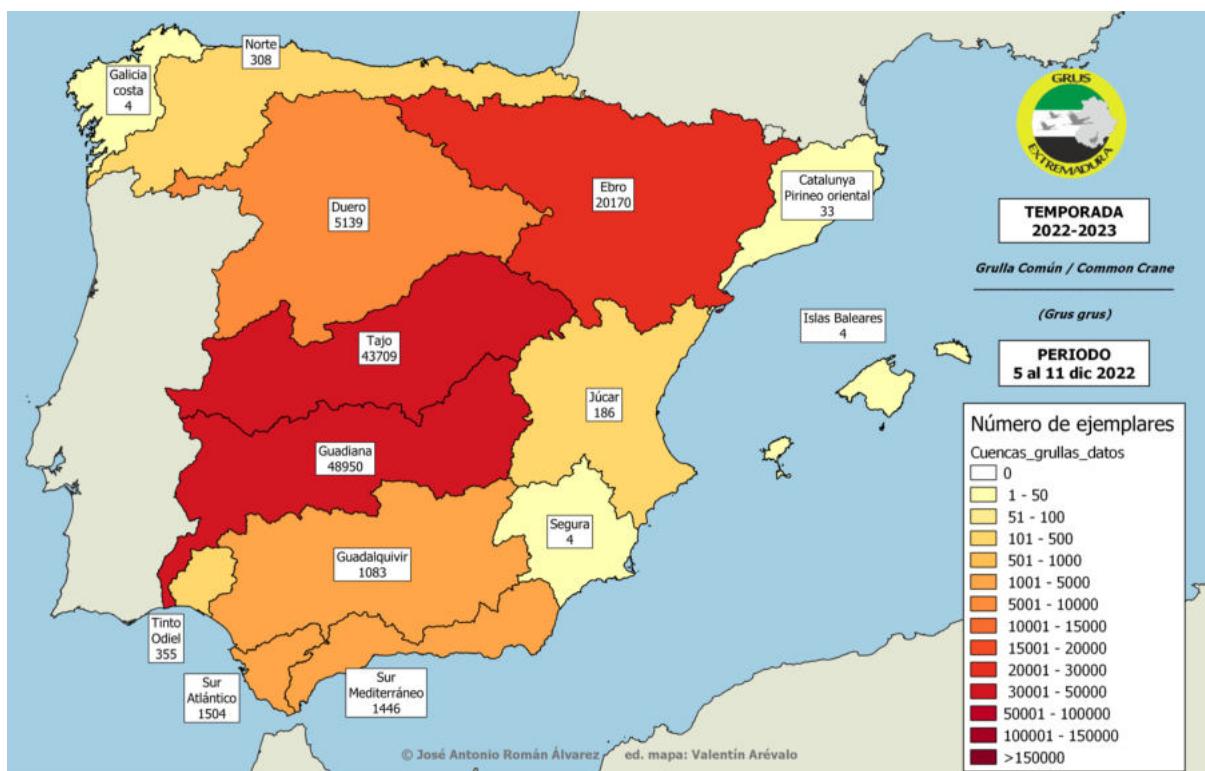


Image nº 35: Young Polish crane in dehesa, Zarza de Granadilla (CC). Photo: Hugo Sánchez

11/12/21: 181 at Corral Rubio (AB) Marcelo Quesada; 14 over Villanueva del Pardillo (M) Patricia Alonso; 1,000 over Cubillejo de la Sierra (GU) Antonio Torrijo; 17 over El Escorial (M) José A. Fimia; passage over Tortuera (GU) Antonio Torrijo; 977 over Pozuelo de Aragón (Z) Dianka (DALMA); 83 in dehesas, Monroy (CC) José Mª Rojo; 2,000 at Llana lagoon, La Yunta (GU), 700 at El Cuartizo lagoon, Campiña de Dueñas (GU), 400 at Las Navas lagoon and El Pobo de Dueñas (GU) Antonio Torrijo; 7 at Castelló d'Empuries (GI) Pere Bacells, Martí González; 125 in Villafáfila nature reserve (ZA) Felipe Rosado; 4 in S'Albufera natural park, Muro, Mallorca (IB) Pere Vicens; 5 in dehesa, Herreruela (CC) Antonio Galán; 400 at Selgua (HU) and 52 at Muella de Terreu (HU) Jesús Lavedán; 5 over San Mateo de Gállego (Z) and 9 at Zuera (Z) Javier Ruiz, Belen Cano; 30 at Ricla (Z) Eloí López; heard at Valdelcubo (GU) Zergio López; heard at Sacedón (GU) at 19:10h, Javi Rejos; 1,147 go to roost at El Hoyo lagoon (AV) Cruz González, José Mª García; 1,269 roost at Valdecañas reservoir (CC) Eva Garzón (SEZ); 5,000 roost at Sotonera reservoir (HU) Silvia Duque, Francisco Quesada, Santi Sancho; 1,116 roost at Riolobos weir (SA) Marina Paniagua, José Mª Azpeitia (Asoc. Sylvestris).

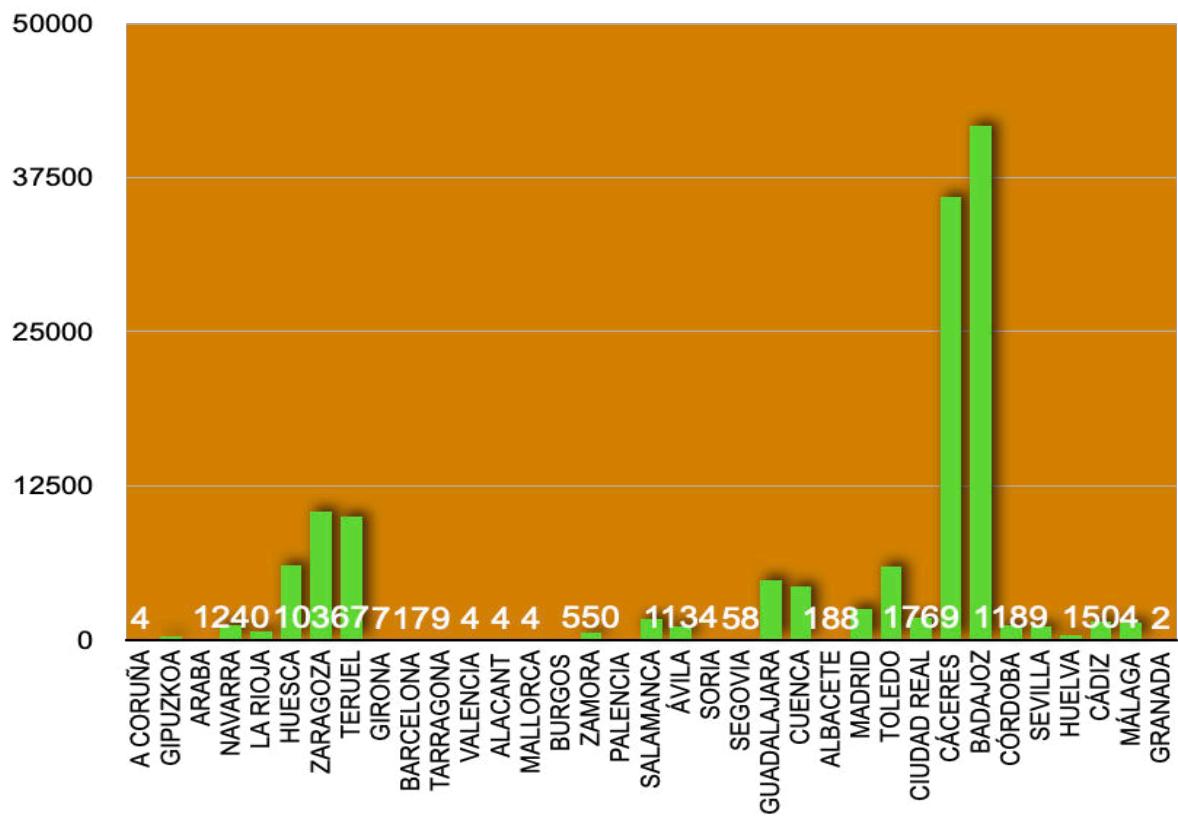


Map n° 23: Distribution and migration by provinces, December 5 to 11

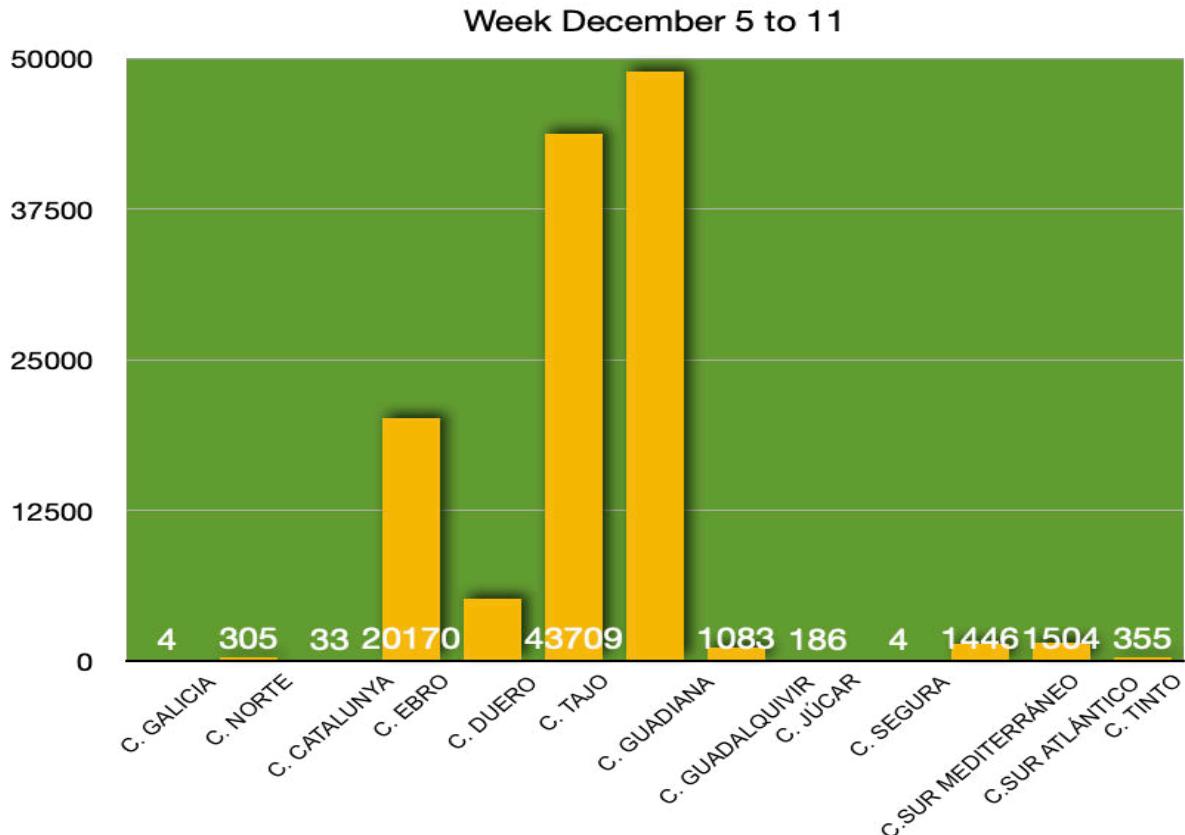


Map n° 24: Distribution and migration by catchment areas. November 28 to December 4

Week December 5 to 11



Graphic nº 17: Distribution and migration by provinces, December 5 to 11



Graphic nº 18: Distribution and migration by catchment areas. December 5 to 11

During much of the week a significant Atlantic front (Efrain) affected sightings of migrants, and the census was done on the 16th, with the weather slightly more stable; during the weekend and the following days, cranes continued to enter the Peninsula, with movements to the southwest:

14/12/22: 85 over Baztán (NA) Xabier Etxarri; 15 over Villaescusa de Haro (CU) Joaquín Jiménez.

15/12/22: 100 over Majadahonda (M) Virginia Moraleda; 15 over Montalbanejo (CU) Joaquín Jiménez.

17/12/22: 118 at La Zolina reservoir (NA) Julen Santa Cristina; 84 over Villaconejos (M) Susana B.; 200 over Turuncún (LR) Alfonso Cillero; 400 over Ocón (LR) Jon Serrano; 132 over Retuerta del Bullaque (CR) Gerardo García; 196 in several groups over Madridejos (TO) Ángel Velasco; 25 over Arnedo (LR) Yolanda Hernández; 30 over Getafe (M) Gumer González; 6 over Canillejas (M) Luis O. Carretero; 289 over Sotos de Alfaro (LR) Borja Sanz; 275 over San Román (LR) Irene Pinto; 67 over Alfaro (LR) Lidia Roncero; 4,800 cross Navarra, Jesús Mari Lekuona *et al*; 307 over Eugi reservoir (NA) Jorge Nubla; 250+226 over Pamplona (NA) Manuel Fernández, Patxi Andueza, Rajen Ayerra; 300 at La Zolina reservoir (NA) Daniel García; 504 over Beriáin and 539 over Morea reservoir (NA) José Ardaiz; 100 over Buñuel (NA) Patricia André#; 50 over Barajas (M) Daniel Izquierdo; 30 over Getafe (M) Gumer González; 6 over Velilla de San Antonio (M) José M^a Sendarrubia; heard at Arnedo (LR) Yolanda Hernández; 75 over Hornos de Moncalvillo (LR) Ramón Lizuain; 65 over San Blás (M) Luis O. Carretero, 4 over Arcicóllar (TO) Fernando Casero, Unai Fuente.



Image nº 36: Cranes going to roost at Alange reservoir (BA). Photo: José A. Román

18/12/22: 210 over Barajas (M) Juan C. Paniagua; 14 over Ugena (TO) Conchi Conde; 175 at Guarra lagoon (SO) and 2 at Herrera lagoon (SO) Juan P. del Álamo, Juan L. Hernández; 67 over Alfaro (LR) Marcos Alguacil; heard at Jirueque (GU) Vicente Aº Peinado; 29 over Villanueva del Pardillo (M) Patricia Alonso; 156 over Sotos de Alfaro (LR) Borja Sanz; 136 over Casa de Campo (M) Gonzalo Criado (Asoc. Sylvestris); 150 over Cabanillas del Campo (GU) Juan M. Nuevo (DALMA); 8 over Txingudi (G) José F. Esparcia; 80 over Cantalojas (GU) Joaquín (DALMA); 300 at La Zolina reservoir (NA) Daniel García; 35 at Loza reservoir (NA) Gaspar Zaldua; 5 at Las Cañas reservoir (NA) Lorea; 35 over Campo Azálvaro (AV) Cruz González; >5,000 set off from Gallocanta lagoon (TE/Z) Antonio Torrijo; 43 over Villacañas (TO) Ángel Velasco; 90+185 over Sevilla la Nueva (M) Mara Brans; 8 over Cáceres, José Mª Rojo; 26 over Leganés (M) Alfredo Mirat; 14 over Ugena (TO) Conchi Conde; 14 over Mérida (BA) Alfonso Cerraro; 25 over Carija hills, Mérida (BA) José A. Román; 65 over Grávalos (LR) E. Villa, Michel Marín; 9 over Villanueva del Pardillo (M); 156 over Sotos de Alfaro (LR) and 9 over Cofín (LR) Borja Sanz; two flocks over El Moncayo (Z/SO) Antonio Torrijo; 213 and nocturnal passage over Ugena (TO) Chon Conde, Conchi Conde, Sonia Núñez; 4 over Salburua (AR) Aitor Ormaetxea; 100 over El Retiro (M) Daniel Izquierdo; 52 over Valdebebas (M) Beatriz Martín; 71 over Torrejón de Ardoz (M) Fernando Ávila; 4 over Utebo (Z) Alfredo Sánchez; 30 over Hoyo de Manzanares (M) Carlos Sevilla; 52 over Madrid, José R. Morales; 80 over Villaverde (M) Jesús Mayoral, Pedros Martinian; 4 over Rivas Vaciamadrid (M) Juanma Santana, Carlos Culebras; 100 over Soto de las Juntas (M) Diego Hernández; 222 over Pinto (M) Beatriz Bermejo, Rafa Al; 356 over Sureste natural park (M) Sonia Wandosell, Diego Martínez; 3 flocks over Mázuecos (GU) José Mª Gómez (DALMA); group over Centenera (GU); 6 over Dohierro (SG) Víctor Coello; 41 over Honzaba (GU) Justo Cilleros, 55 over Bardenas Reales (NA) Julio Hernando; 30 over Alpedrete (M) Carlos Guillén; 326 over Valdebebas (M) Elena Baonza, Juan C. Hidalgo, Beatriz Martín; 80 over Pulgar (TO) García de los Ríos, Pablo Linaje; 6 over Velilla de San Antonio (M) José Mª Sendarrubia; 100 over Soto de las Juntas (M) Diego Herrero; 12 over Villaviciosa de Odón (M) Mark Davis; 28 over Leganés (M) Alfredo Mirat.

19/12/22: 28 over Velilla de San Antonio (M) Daniel Gonzalo; 22 over Rivas Vaciamadrid (M) Rafa Al; 12 over Sureste natural park (M) Chemi Ibáñez; 33 over Villaseca de la Sagra (TO) Sonia Wandosell, Diego Martínez; 100 over Almoguera reservoir (GU) Fernando Alonso, Carlos Nos; 700 over Entrepeñas reservoir (GU) Fernando López; 156 over Guadalajara, Amparo López; 5 over Sevilla, Adi Rao, Rajan Rao; 19 over Madrid, Antonio: 75 over Hornos de Moncalvillo (CU) Jesús Porrero; 75 over Almazán (SO) Fernando Chaguaceda; 74 over Guadalajara, Amparo López; 16 over Madrid, Antonio R.; 271 over Leganés (M) Alfredo Mirat; 25 at Tablas de Alarcos (CR) Lucas de las Heras.

21/12/22: 17 over Vila-Sacra (GI) Joan Ventura.

22/12/22: 11 over Rincón de Beniscornia (MU) Alberto García; heard in Santoña marsh (CT) Arturo Fuente; 12 over Santillana reservoir (M) Antonio Espín.

23/12/22: 2 over Arija (BU) Kepa Alkiza.

24/12/22: 2 at Yecla (MU) Fernando Rico.

24/12/22: 56 over Velilla de San Antonio (M) David García; 2 over Yecla (MU) Fernando Rico.

25/12/22: 32 over Corral de Calatrava (CR) David Pérez; 13 over Sotos de Alfaro (LR) Borja Sanz; 1 at Punta Entinas (AL) Ángel Arellano; 70 over Aldeanueva de Atienza (GU) Mario (DALMA).

26/12/22: 35 over Pozuelo de Calatrava (CR) Francisco Hidalgo; 3 over Villanueva del Pardillo (M) Patricia Alonso; 17 over Peñaflor de Gállego (Z) María Berna; 22 over Sotos de Alfaro (LR) Andrés De la Torre: Jesús Ucha, José R. Martínez; 24 over Arnedo (LR) Belén Hernández; flocks arrive at Gallocanta lagoon (Z/TE) Carmina Franco; 14 over Matarrubia

(GU) Juanfran (DALMA); 312 at Pétrola (AB) Rafa Torralba; 781 roost at Villafáfila nature reserve (ZA) Arón Blázquez, Gary Losada; 12 over El Pardo woods (M) Beatriz Bermejo; 85 over Madrid, Antón Cnudde, Martijn van der Weijzic; 80 over Rivas Vaciamadrid (M) Al Bozic; 5 over Aranjuez (M) Manuel Vega; 120 at La Zolina reservoir (NA) Adrián M.; 400 at La Mueda reservoir (NA) Jon Sola, Rajen Ayerra; 28 over Valdetorres de Jarama (M) Luis Bello, David Guillén; 100 over Santillana reservoir (M) Elver G.

27/12/22: 5 over Santillana reservoir (M) Luna Redondo; 50 over Valtierra (NA) Xabier Parra; 34 over Alfaro (LR) Óscar Gutiérrez, Carlos Gutiérrez-Expósito; 17 over Ablitas (NA) Juan M. Pérez; 50 over Ugena (TO) Conchi Conde.

28/12/22: 65 over Tierra Muerta (CU) Fernando Cuenca; 37 over Alfaro (LR) Borja; 389 at the Santa Teresa reservoir roost (SA) Vicente G. Garrudo.

29/12/22: 24 over Alfaro (LR) Miguel Martínez.

40 over Marburg (Germany) heading NE. Martin Kraft.

30/12/22: 67 migrating north over Madrid, Juan C. Rubio.

31/12/22: 53 heading NE over Marburg (Germany) Martin Kraft.

01/01/23: 53 over Getafe (M) Fernando López; 90 over Rivas Vaciamadrid (M) Sara Navarro; 50 over Velilla de San Antonio (M) Abel Casado; 53 over Getafe (M) Fernando López.

03/01/23: 60 over El Recuenco (LR) and 140 over Calahorra (LR) Javier Ochoa; 40 over Comarca de Esteruelas (M) Óscar Oeo; 247 over Baztán (NA) Xabier Etxarri; 140 over Degollada (LR) J. Ochoa; 61 over Cabanillas del Campo (GU) José M^a Gomez (DALMA); heard over Guadalajara Juan M. Nuevo (DALMA); 34 over Arnedo (LR) Belén Hernandez; 194 over Ricla (Z) Javier Train; 118 over Pamplona (NA) Rajen Ayerra; 62 at Loza reservoir (NA) Jorge Nubla; 7 over Valtierra (A) Jesús M. Lekuona; 36 at Las Estanquillas reservoir (NA) Jesús Arribas, Juan L. Hernández; 60 over Zaragoza, Elena Cantalapiedra; 24 over Ribarredonda (GU) Rodri G. Vegas; 700+ cross Navarra during the day, Jesús Mari Lekuona; heard at 17:17h over Sacedón (LR) Javi Rejos; migrating flockss arrive at 18:00h at Gallocanta lagoon (Z/TE) Javier Mañas.

04/01/23: 17 over Madrid, Christy Esmahan; 60 over Valdemoro (M) Daniel Todón; 1,000+ set off from Gallocanta lagoon (TE/Z) Antonio Torrijo; 20 over Ugena (TO) Mercedes Panes; 100 over Cabanillas del Campo (GU) José M^a Gómez (DALMA); 300 arrive at Gallocanta lagoon (Z/TE) Antonio Torrijo; 90 over Seseña (TO) and 45 over Borox (TO) Óscar Frías; 92 at Pulquer reservoir (NA) and 50 over Ablitas (NA) Rajen Ayerra; 82 over Ricla (Z) Javier Train; 87 over Leganés (M) Manuel Flores; 51 over Aranjuez (M) Alberto Ruiz.

05/01/23: 50 over Ugena (TO) Conchi Conde; 100 over Molina de Aragón (GU) Alberto Ruiz.

06/01/23: 50 over Sureste natural park (M) Carlos Talabante.

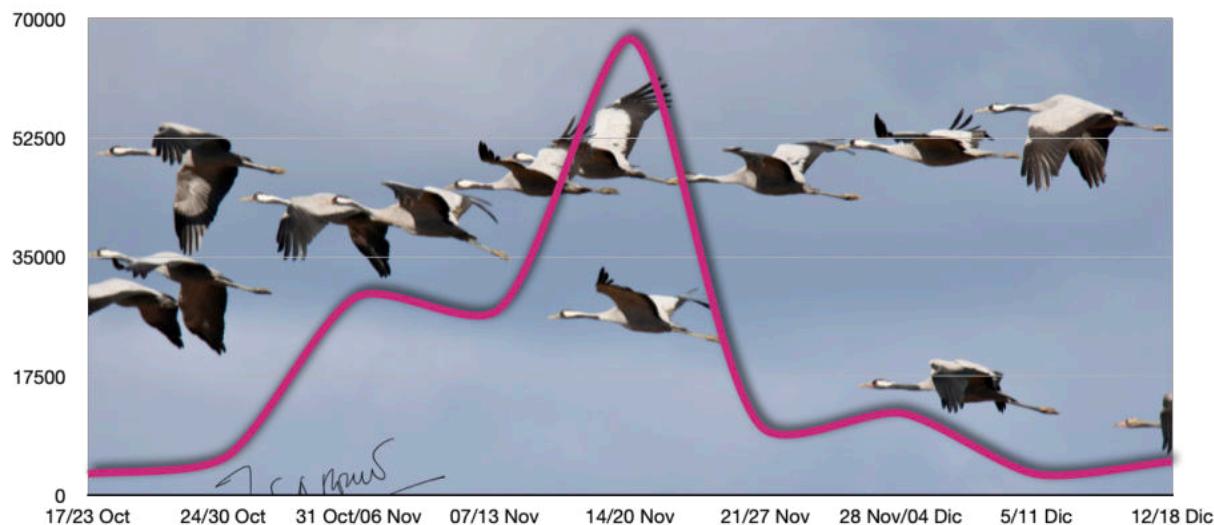
The post-breeding migration began late on this occasion, as it wasn't until well into October that the first groups began to arrive, in low numbers.

It began to increase in intensity in the last week of the month, and the wave increased until reaching its peak in the third week of November, between the 14th and 20th of the month, particularly on the latter day. From then the wave decreased, although there was another peak in the final days of the month.

A discreet arrival of birds continued in December, and arrivals continued, even on the days after the first winter census, when some 5,000 birds arrived in the Peninsula.

Small groups continued arriving in the final days of December and the first days of January.

Post-breeding migration in Spain in 2022



Graphic nº 19: Evolution of the post-breeding migration in Spain, autumn 2022.

The weather had an impact on tracking migration when some rain fronts crossed the Peninsula during the period, these made flock sightings difficult.

We were able to count **153.108** cranes during this period, of which 16,964 (12%) were counted in the Basque Country, 105,897 (78%) over Navarra, 7,835 (6%) over Huesca, in Aragón, 4,749 (3%) over Catalonia, 240 (0.1%) over the east coast and 223 (0.1%) over the Balearic Isles.

Clearly the bulk of migration took places through the Pyrenees in Navarra, involving 78% of the total, followed by 6% through the Pyrenees in Aragón (Huesca), accounting for 85% of the total migration between them. The arrival of cranes through the Basque Country was notable, with 12% of the total. Finally, 3% came through the Catalan Pyrenees and the Gulf of Lion, and very few over the Balearic Isles and the east coast.

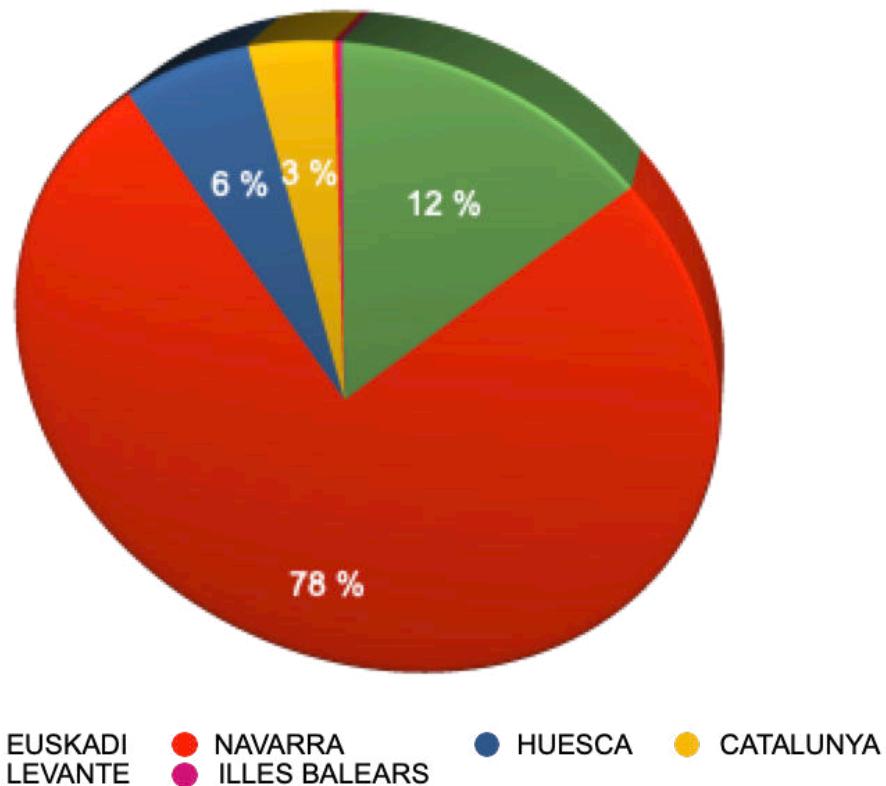
Nocturnal migration has to be added to this, this being difficult to monitor; cranes frequently migrate by night, especially during the autumn season.

No flocks were noted migrating north during the period.



Graphic nº 20: Weekly migration by Autonomous Community.

POST-BREEDING MIGRATION 2022



Graphic nº 21: Distribution of post-breeding migration in autumn 2022.

WINTERING POPULATION IN SPAIN

Methodology and general results

Continuing our collaboration with Portugal, the census dates were agreed, deciding on **16 December 2022 and 27 January 2023**.

In the days immediately before the census a significant rain front (Efrain) produced copious rainfall, especially in the south-west of the Peninsula, filling many ponds and medium-sized reservoirs. This radically changed the cranes' use of roost sites, large roosts splitting into several smaller ones, even abandoning some because the high water levels (e.g. Los Canchales reservoir, BA) left some shorelines unsuitable. In addition, many of the access tracks were impractical, which made difficult, or prevented in some cases, access to some count points, so in certain cases the counts had to be done when the track conditions allowed.

On the other hand, the drought in the upper floodplain of the Guadiana Valley (Central Zone) had prevented sowing cereals such as maize and rice, so the cranes had a shortage of feeding resources in these areas, which changed the demographics and distribution of the birds.



Image nº 37: Promotional poster for the first census. Photo: Raquel Mansilla. Design: José Leal.

The census methodology used was to census at roosts and in feeding areas, as cranes, being gregarious, are usually very much birds of habit and during the entire winter they can use the same resting areas, whether they are farm ponds, reservoirs, river backwaters or flooded plots, using them for sleeping and bathing daily. After roosting, they disperse over the feeding area and at mid-day they usually bathe and rest before dispersing again, and at the end of the afternoon they fly to the roost sites.

-Roost or rest area: it is essential to visit known roost sites at least once before the census, since some may change due to the state of the wetland. When the ponds are dry, cranes look for others which have sufficient water, and in the case of reservoirs, the location may change for the same reasons.

Roosts are generally counted in the evening when birds gather to rest, counting from a high point the cranes arriving at the place. This can also be done when birds leave the roost. We usually recommend doing the census in the morning, as this is when all the birds that have spent the night can be counted, apart from days with fog or poor visibility; this is more effective than the evening count, as some birds may arrive as it gets dark and it is difficult to count them. In all cases, the choice of time is left to the census teams. In either case, you need to be at the observation point before first light (at least $\frac{1}{2}$ hour) if doing the census in the morning, and an hour and a half before sunset if it is being done in the evening.



Image nº 38: Cranes at roost in Córdoba province. Photo: Laura Mª Sánchez.

-Feeding station or feeding area: in areas with large concentrations of cranes and with many (and changing) roost sites, such as the Central Zone of Extremadura, to make the best use of the human resources, the census is done in feeding areas, making use of the network of tracks, generally reasonably accessible, counting the birds on the ground and dividing the zone into distinct sectors which are covered by different teams simultaneously.

It starts when the birds have spread out over the area early in the morning, following a previously planned route which enables us to note all the flocks, trying not to disturb them, to avoid mixing them and duplicating counts. This should be finished by mid-day, as this is when the cranes concentrate again to bathe and rest at certain points with water.

If necessary, the census can be finished after the rest, once the birds have spread out again over the feeding areas, although there may be changes and you have to look out for these to avoid repeating counts.

In the same way, it is necessary to visit these areas before the census to locate which places the cranes are using most often, as crop rotations are frequent and each season they may be distributed differently. This was particularly the case during the current campaign, when there were big changes, with the absence of maize and rice; birds had to use stubbles and recently-sown cereals, as well as sunflower stubbles and even rice plants that have sprouted spontaneously after some paddies were flooded.



Image nº 39: Flock of cranes in sunflower stubble. Photo: José A. Román.

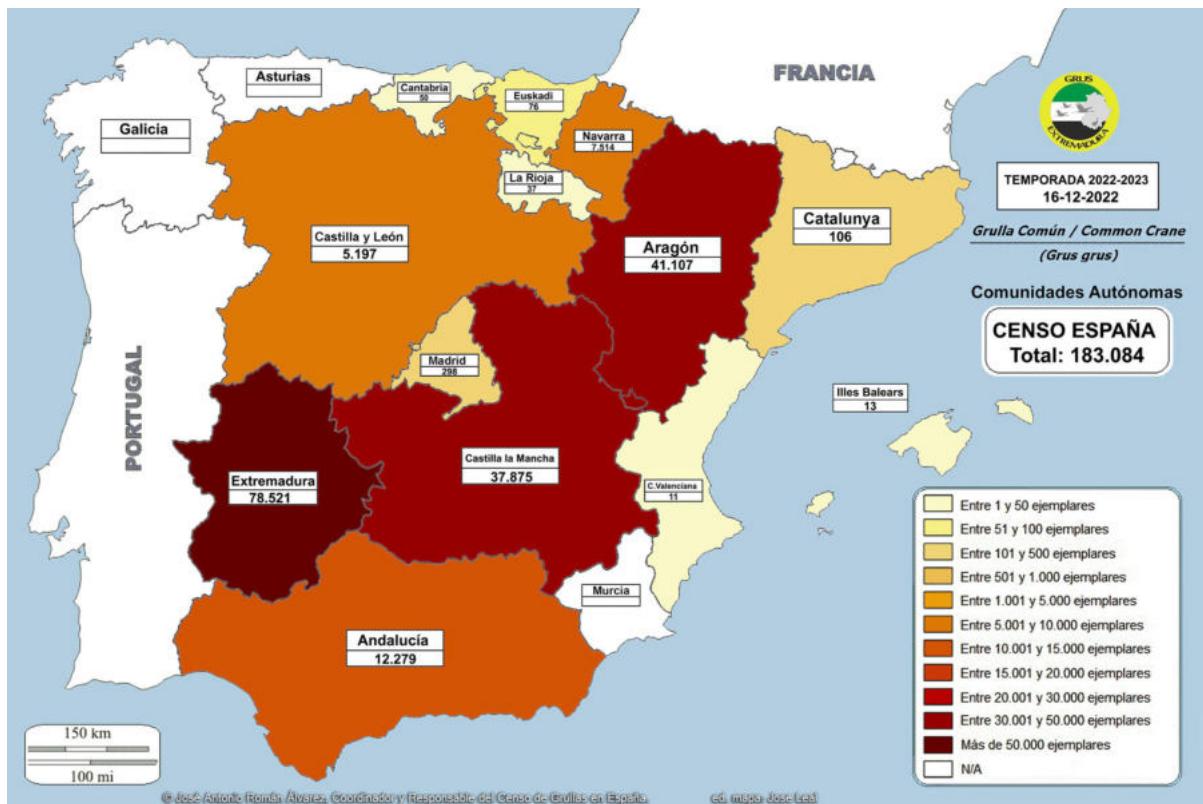
FIRST CENSUS

As stated earlier, “Efrain” caused significant changes for the cranes, which in the days before the census changed the location of some roosts, and, combined with the impossibility of reaching some, affected the results of the census.

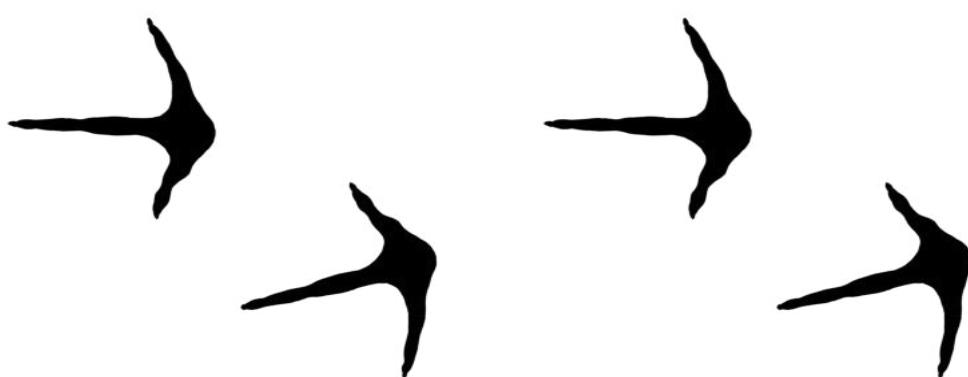
The result was **183,483** cranes. This figure is the lowest of the last five years, in which we have never had under 200,000 birds. The cause was the changes in the previous days and the shortage of feeding resources in Extremadura, which is the region with the biggest decline. Nonetheless, it hosted the most numerous contingent, with 78,521 birds (43%),

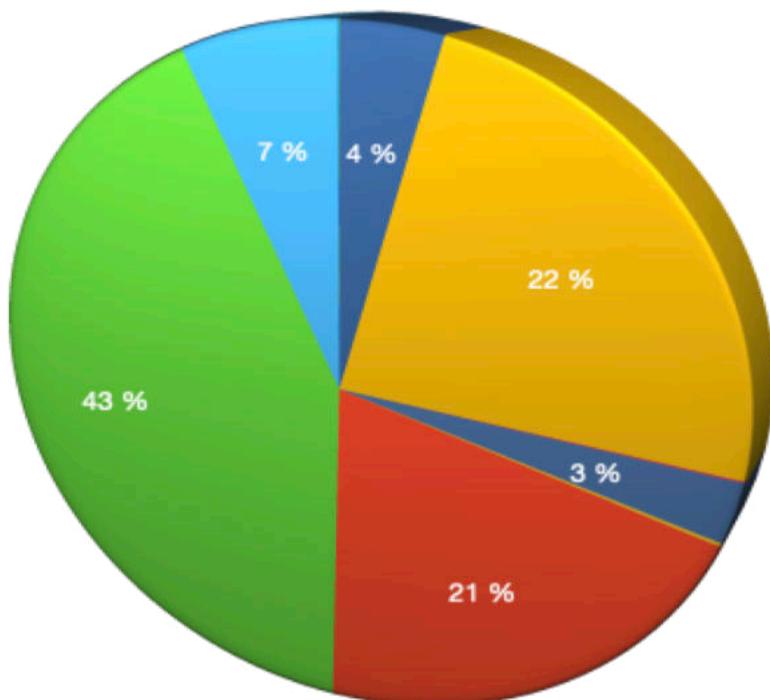
followed by Aragón with 41,107 (22%) then Castile – La Mancha with 38,274 (21%) birds, together hosting 85% of the wintering cranes in Spain.

The fourth in importance was Andalucía with 12,279 (7%) birds, followed by Navarra with 7,514 (4%), although more than half of these cranes were birds on migration. Next was Castile-y-León with 5,197 (3%) then Madrid Community with 298 migrating birds, 106 in Catalonia, of which the majority were also migrants, 76 in the Basque Country and 50 in Cantabria, also migrants, as were the 37 in La Rioja and 13 in the Balearic Isles and 11 in Valencia Community.



Map nº 25: Distribution of the wintering population of cranes by Autonomous Community during December.





Graphic nº 22: Distribution of cranes during December, by Autonomous Community.

Badajoz province, with 42,896 (24%) cranes, is the one hosting the largest population, followed by Cáceres with 35,575 (20%) birds, then Zaragoza with 20,260 (11%).

The birds in Gipuzkoa, Santander, Logroño and Madrid were all migrants.

In Navarra 2,630 were censused in roosts, and the remainder, 4,884, were birds that arrived on migration in the days following the census.

In Aragón, the majority was in Zaragoza, followed by Teruel with 14,624 (8%) and Huesca with 6,223 (3%).

In Catalonia, wintering cranes were censused in Girona (11) and Tarragona (5), the rest (100) were birds on migration.

In Valencia Community, 4 were in Castellón, 5 in Valencia and 2 in Alicante.

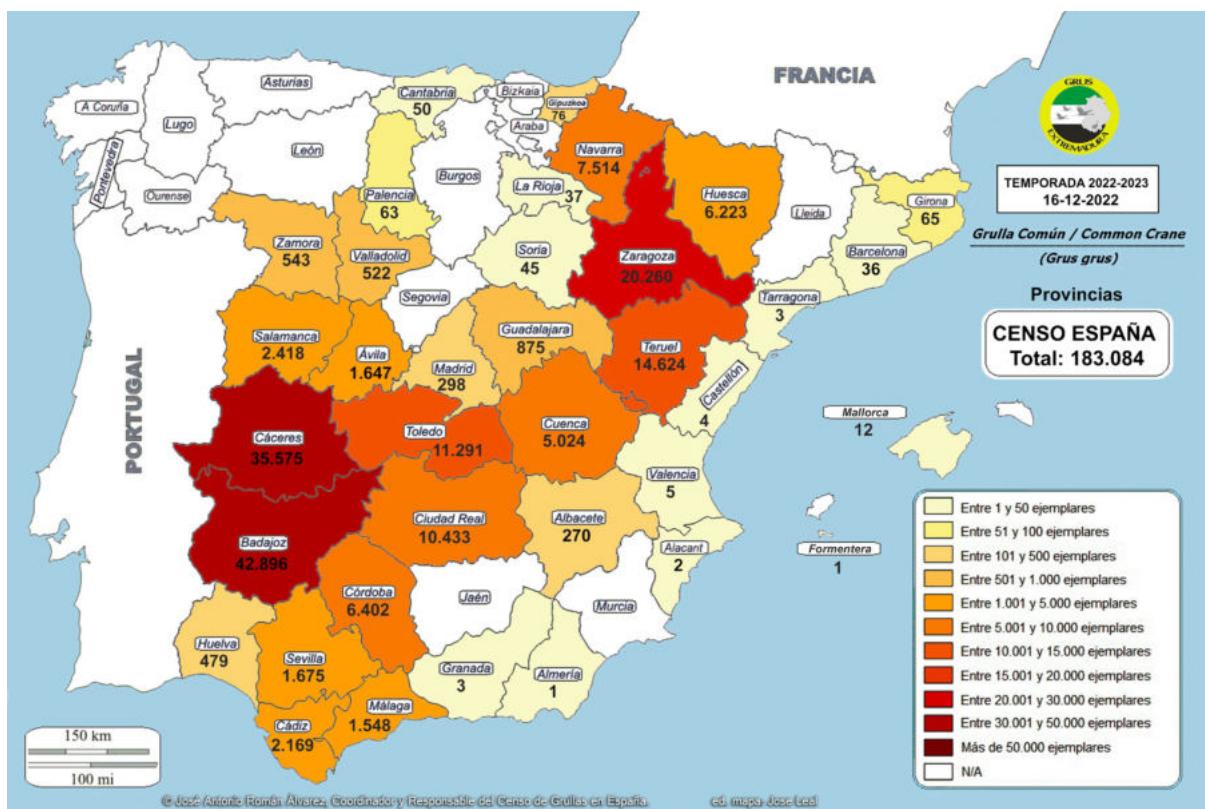
In the Balearic Isles, 11 were on Mallorca and only 1 was on Formentera, probably lost.

In Castile-y-León, 45 migrating birds were detected in Soria, 63 wintering in Palencia province, 543 in Zamora province, 522 in Valladolid, 2,576 in Salamanca and 1,647 in Ávila.

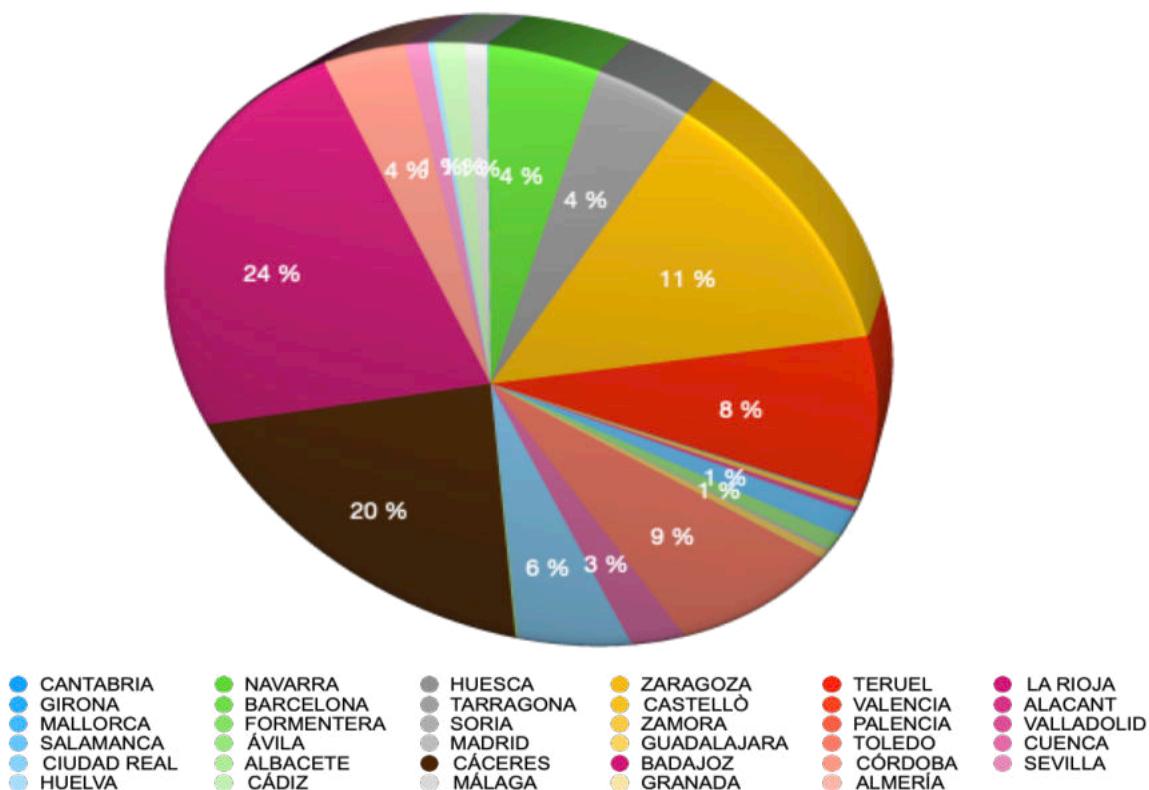
In Castile - La Mancha, 875 were migrating over Guadalajara, 15,458 (8%) were counted in Toledo, 5,024 (3%) in Cuenca, 11,486 (6%) in Ciudad Real and 170 in Albacete.

In Extremadura, 31,359 were counted in the Central Zone sector (17%), 28,870 (16%) in the Tajo sector and 20,242 (11%) in the Guadiana sector.

In Andalucía, 6,402 (3%) were counted in Córdoba province, 1,675, in Seville, 479 in Huelva, 2,169 (1%) in Cádiz, 1,548 in Málaga, 3 in Granada and 1 in Almería, probably a bird on passage or lost.

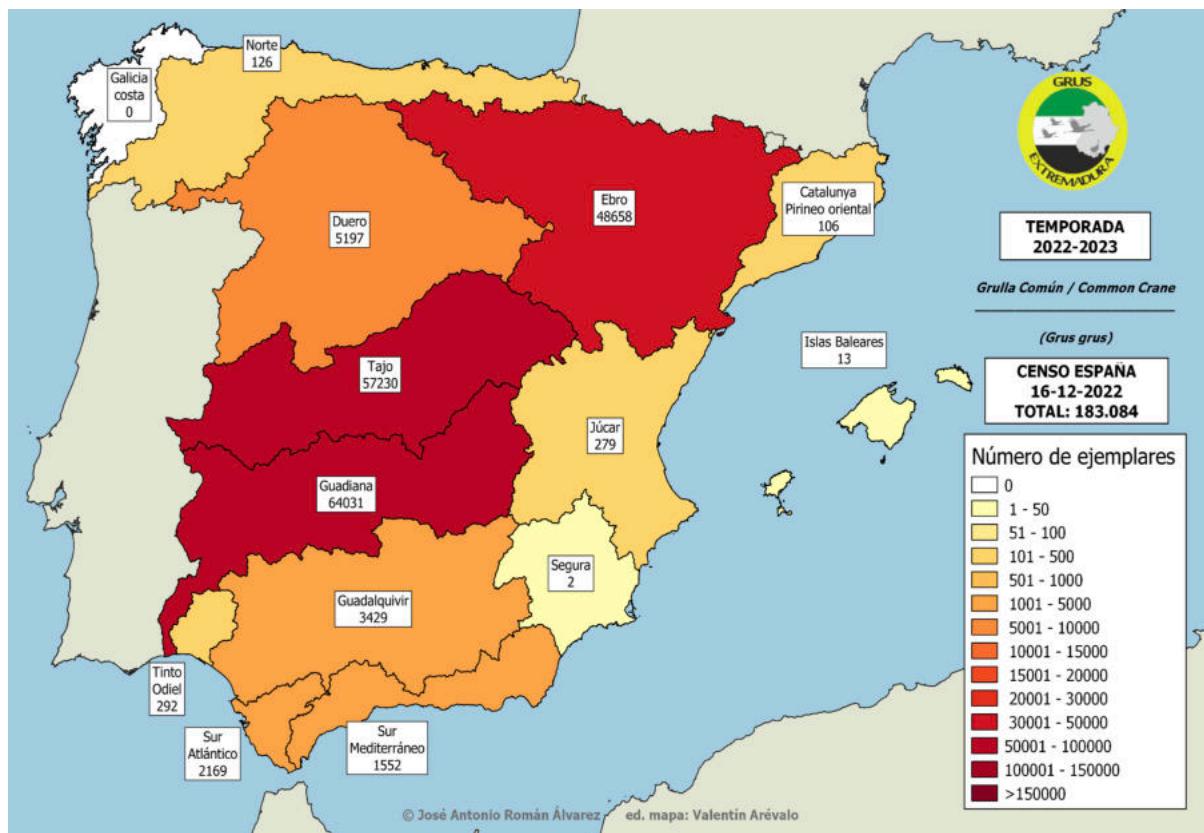


Map nº 26: Provincial distribution of the wintering crane population in December.



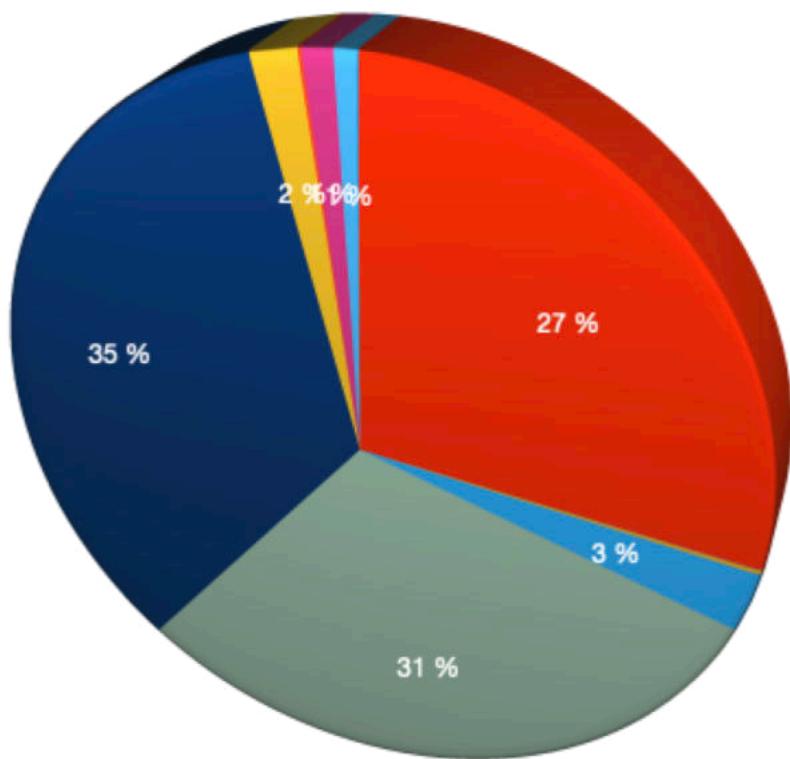
Graphic nº 23: Provincial distribution of the wintering crane population in December

By water catchment areas, the Guadiana, with 64,031 (35%) has the biggest wintering population, followed by the Tajo, with 57,230 (31%), and after that the Ebro, with 48,658 (27%) birds. These three catchment areas host 93% of the total. In fourth place, they are followed by the Duero catchment area, with 5,197 (3%), Guadalquivir with 3,429 (1.9%), Atlantic South with 2,169 (1.1%), Mediterranean South with 1,552, 292 in the Tinto, 279 in the Júcar, 126 in the North (all migrants), 106 in Catalonia, 13 in the Balearics and 2 in the Segura.



Map nº 27: Distribution by water catchment area in December.

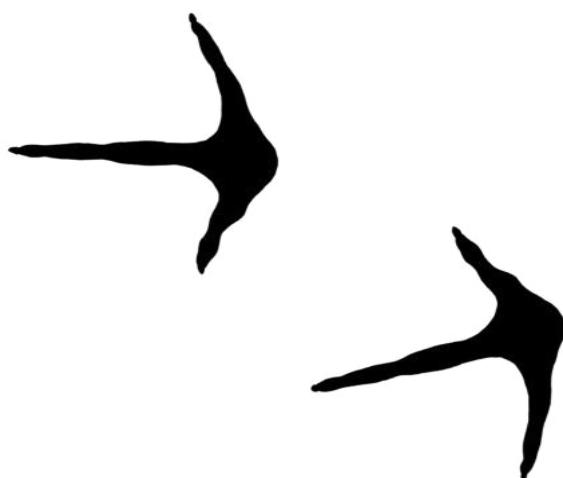




Legend:

Color	Catchment Area
Blue	C. NORTE
Red	C. EBRO
Green	C. TINTO
Yellow	C. GUADALQUIVIR
Pink	C. CATALUNYA
Light Blue	C. DUERO
Dark Blue	C. BALEAR
Dark Green	C. S. ATLÁNTICO
Dark Yellow	C. JÚCAR
Dark Blue	C. GUADIANA
Light Blue	C. SEGURA
Dark Yellow	C. GUADALQUIVIR

Graphic nº 24: Distribution by water catchment area in December.



SECOND CENSUS

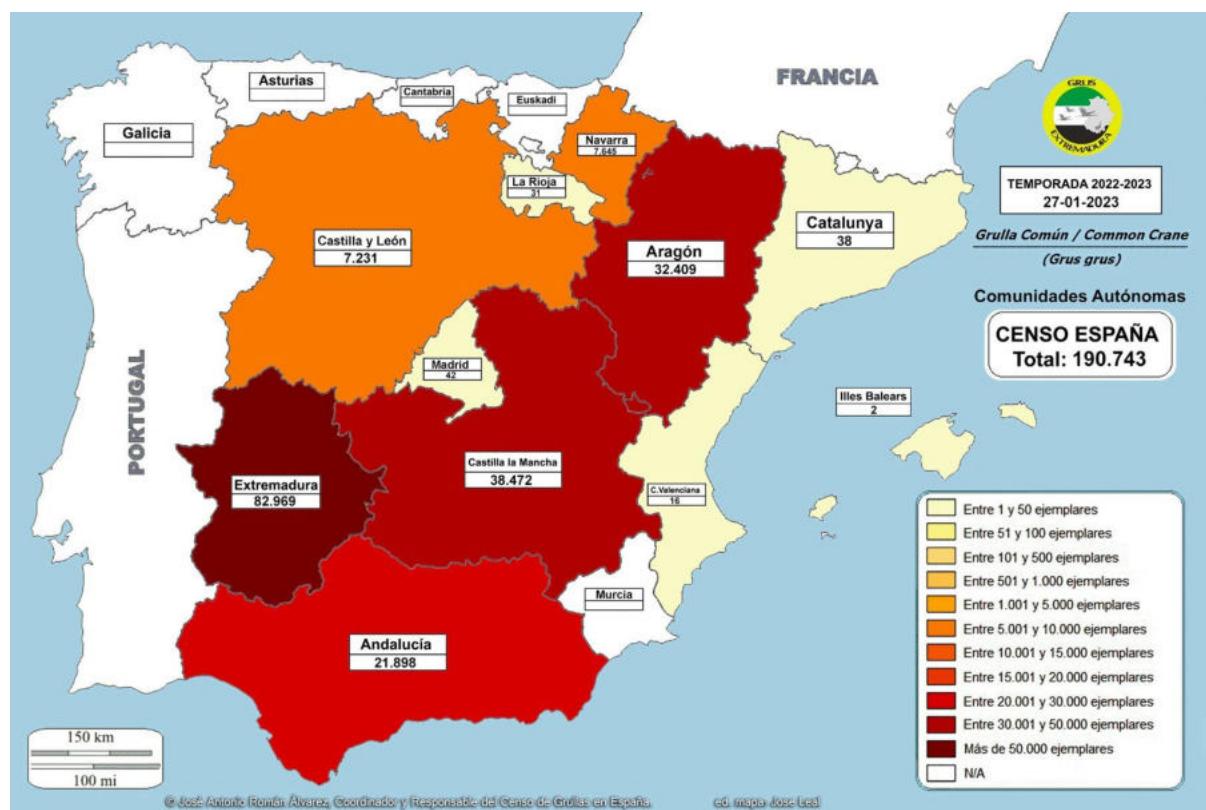
The second census of the season was undertaken on 27 January. In the northern half of the country a snowstorm made access difficult to some lagoons in Guadalajara, but in general it was done without other problems. In the rest of the country, the good weather favoured the census.

There were significant changes in some large roosts in Campo Arañuelo (CC/TO), such as Valdecañas reservoir, due to the high levels in the many farm ponds and small reservoirs, which broke up the big roosts into smaller ones. Nevertheless, an increase in the population associated with dehesas in the south-west (which has always been traditional) was produced, to the detriment of the Central Zone of Extremadura, which, as already commented on, lacked maize and rice stubbles caused by the lack of water that prevented their cultivation. Replacing these with winter cereals or beans reduced the number of wintering birds in this important area.

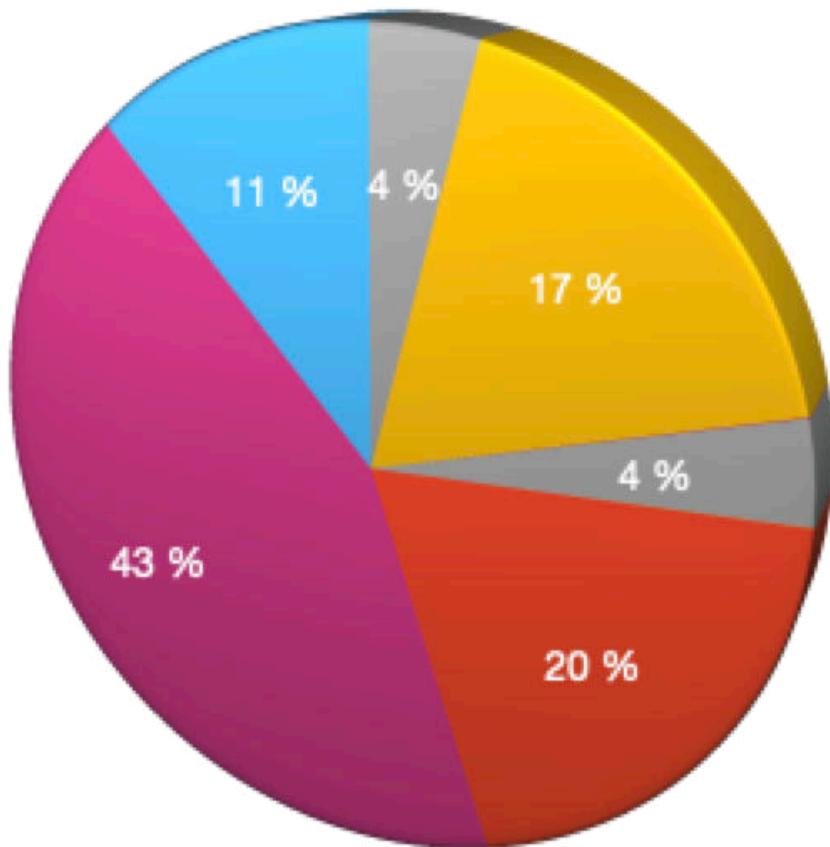
Image nº: Promotional poster for the second Iberian census of the season. Photo: José A. Román. Design: José Leal.

The result of the second census was **190,743** cranes, which means an increase of 7,000 birds over December, probably because of better coverage.

We censused 7,645 (4%) in Navarra, 32,409 (17%) in Aragón, 31 (0.01%) in La Rioja, 38 (0.01%) in Catalonia, 16 in the Community of Valencia, 2 in the Balearic Isles, 7,231 (3.7%) in Castile-y-León, 41 (0.01%) in the Community of Madrid, 38,472 (20%) in Castile-la-Mancha, 82,969 (43.5%) in Extremadura and 21,898 (11.4%) in Andalucía.



Map nº 28: Distribution of cranes by Autonomous Community in January.



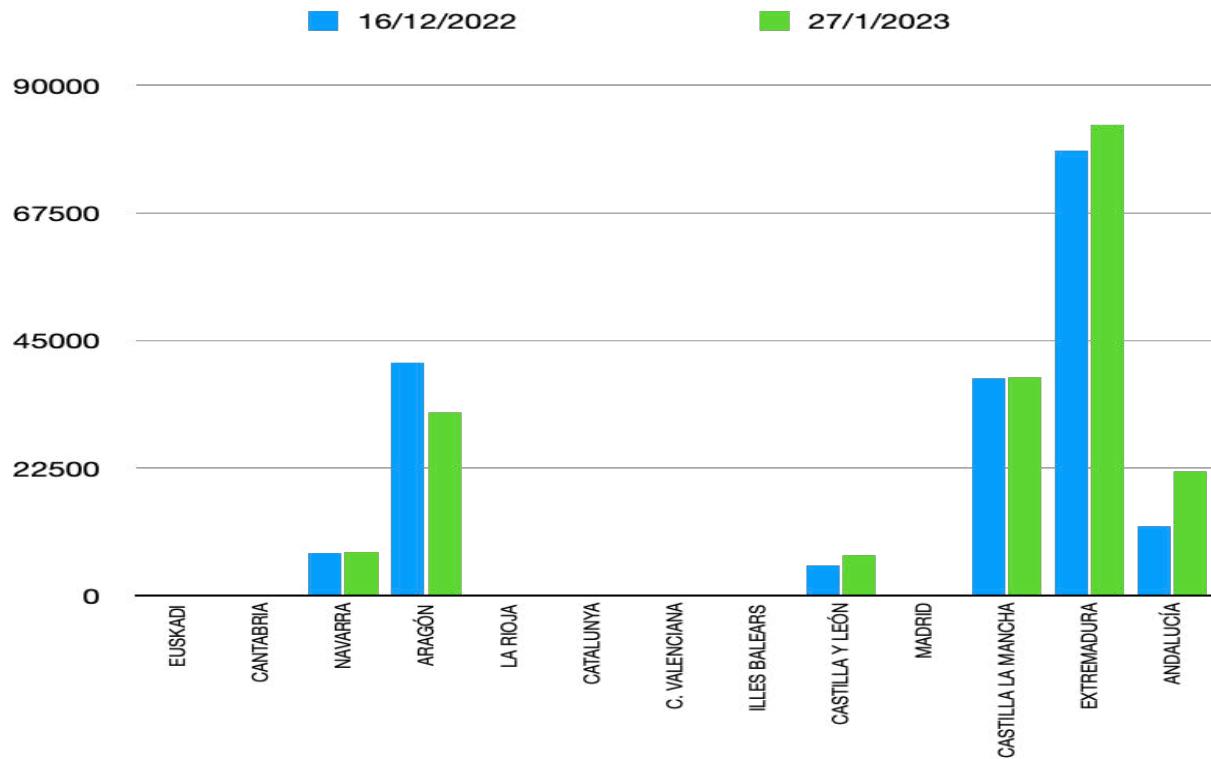
- EUSKADI
- ARAGÓN
- C. VALENCIANA
- MADRID
- ANDALUCÍA
- CANTABRIA
- LA RIOJA
- ILLES BALEARS
- CASTILLA LA MANCHA
- NAVARRA
- CATALUNYA
- CASTILLA Y LEÓN
- EXTREMADURA

Graphic nº 25: Distribution of cranes by Autonomous Community in January.

Comparing the two censuses, there were increases in the Autonomous Communities of Castile-y-León with 7,231 (3.7%), Extremadura with 82,969 (43.5%) and Andalucía with 21,898 (11.4%). Numbers were stable in Navarra with 7,645 (4%), La Rioja with 31 and Castile-la-Mancha with 38,472 (20%), with decreases in Aragón with 32,406 (17%), Catalonia with 38, Balearic Isles with 2, Valencia with 16 and Madrid with 42 birds.

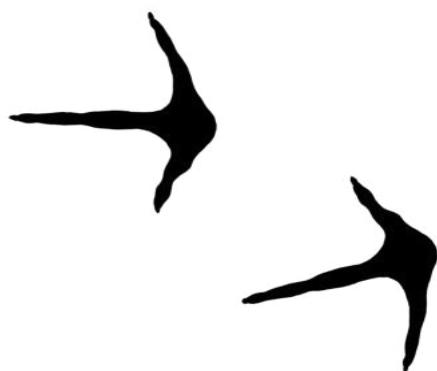
AUTONOMOUS COMMUNITY	16/12/2022	%	27/1/20 23	%
THE BASQUE COUNTRY (EUSKADI)	76	0.04	0	0
CANTABRIA	50	0.02	0	0
NAVARRA	7514	4	7645	4
ARAGÓN	41107	22.4	32409	17
LA RIOJA	37	0.02	31	0.01
CATALONIA	106	0.05	38	0.01
C. VALENCIA	11	0	16	0
BALEARIC ISLES	13	0	2	0
CASTILE-Y-LEÓN	5367	2.8	7231	3.7
C. MADRID	298	0.1	42	0.01
CASTILE-LA-MANCHA	38274	20.8	38472	20
EXTREMADURA	78521	42.7	82969	43.5
ANDALUCÍA	12279	6.7	21898	11.4
SPAIN	183653		190743	

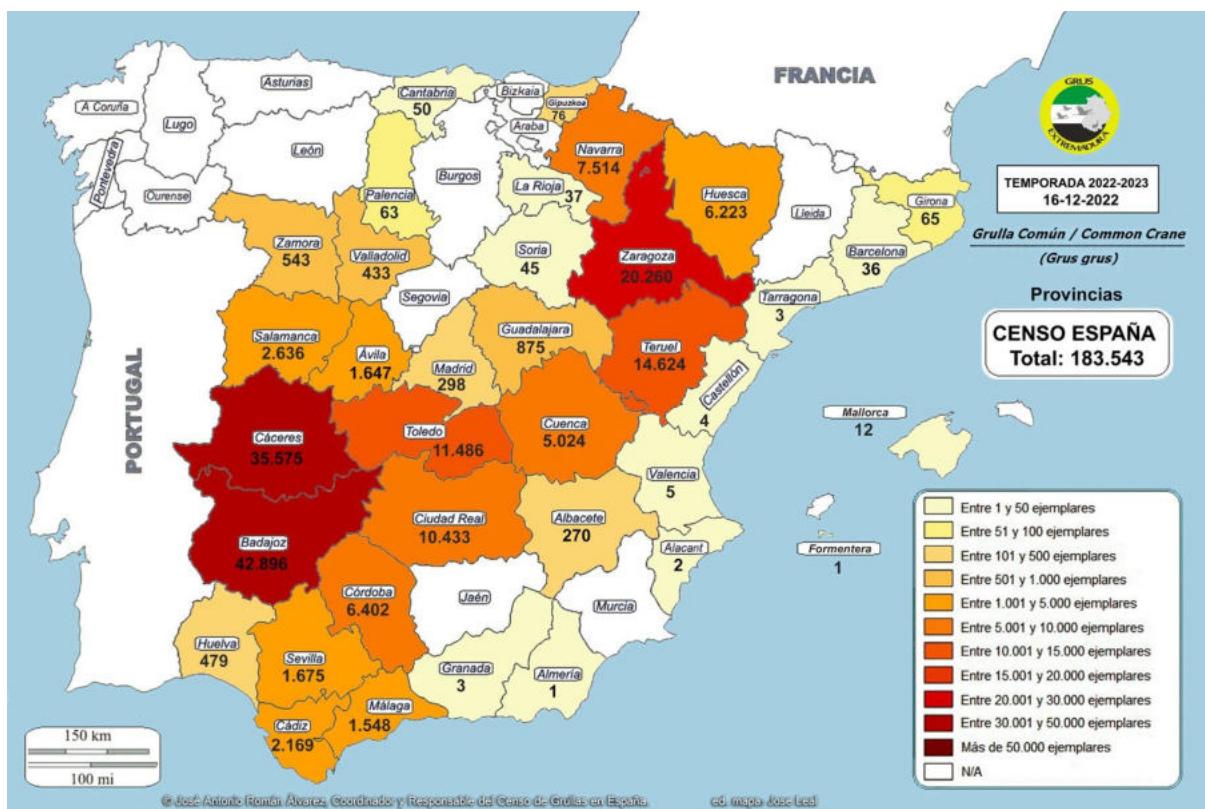
Table n° 1: Comparison of the December and January censuses by Autonomous Community.



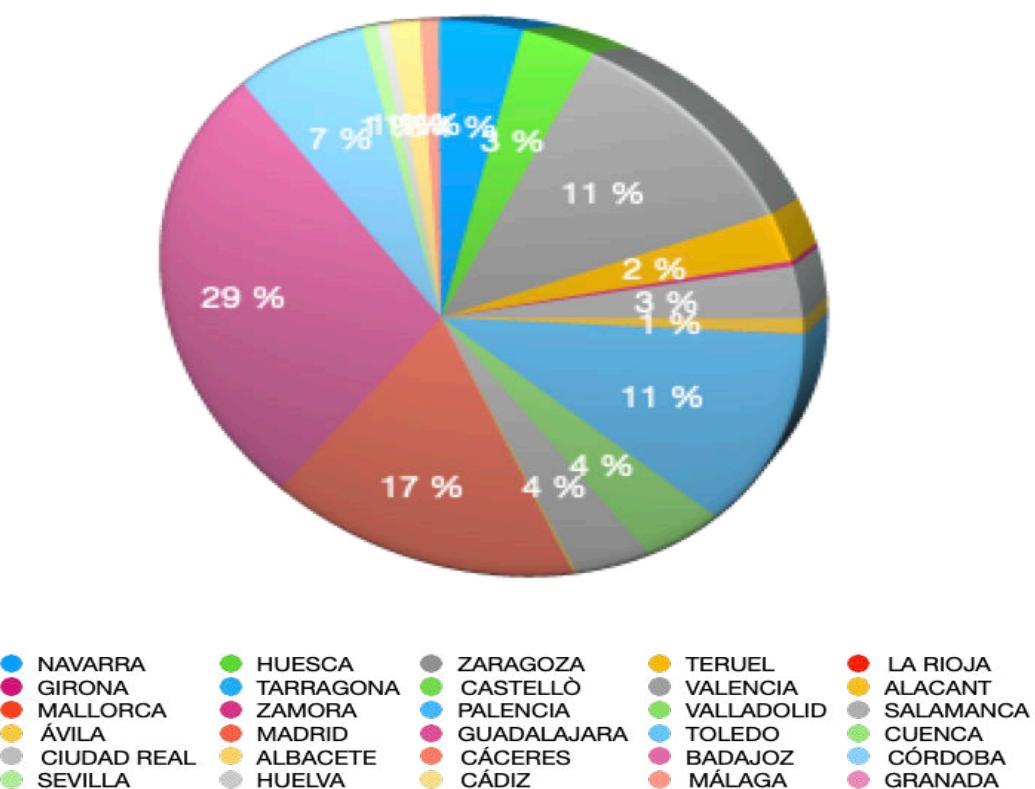
Graphic nº 26: Comparison of the December and January censuses by Autonomous Community.

By provinces, the counts were: 7,645 (4%) in Navarra, 6,308 in Huesca (3%), 21,222 (11%) in Zaragoza, 4,789 (2.5%) in Teruel, 31 in La Rioja, 31 in Girona, 5 in Tarragona, 1 in Valencia, 15 in Alicante, 2 in Mallorca, 432 in Zamora (0.2%), 2 in Palencia, 2 in Valladolid, 5,216 in Salamanca (2.7%), 1,579 (0.8%) in Ávila, 42 in Madrid, 22,616 (11.8%) in Toledo, 8,340 (4.3%) in Cuenca, 8,095 (4.2%) in Ciudad Real, 22,615 (12%) in Cáceres, 58,766 (31%) in Badajoz, 14,325 (7.5%) in Córdoba, 1,629 (0.8%) in Sevilla, 1,198 (0.6%) in Huelva, 2,935 (1.5%) in Cádiz, 1,830 (1%) in Málaga and 2 in Granada.



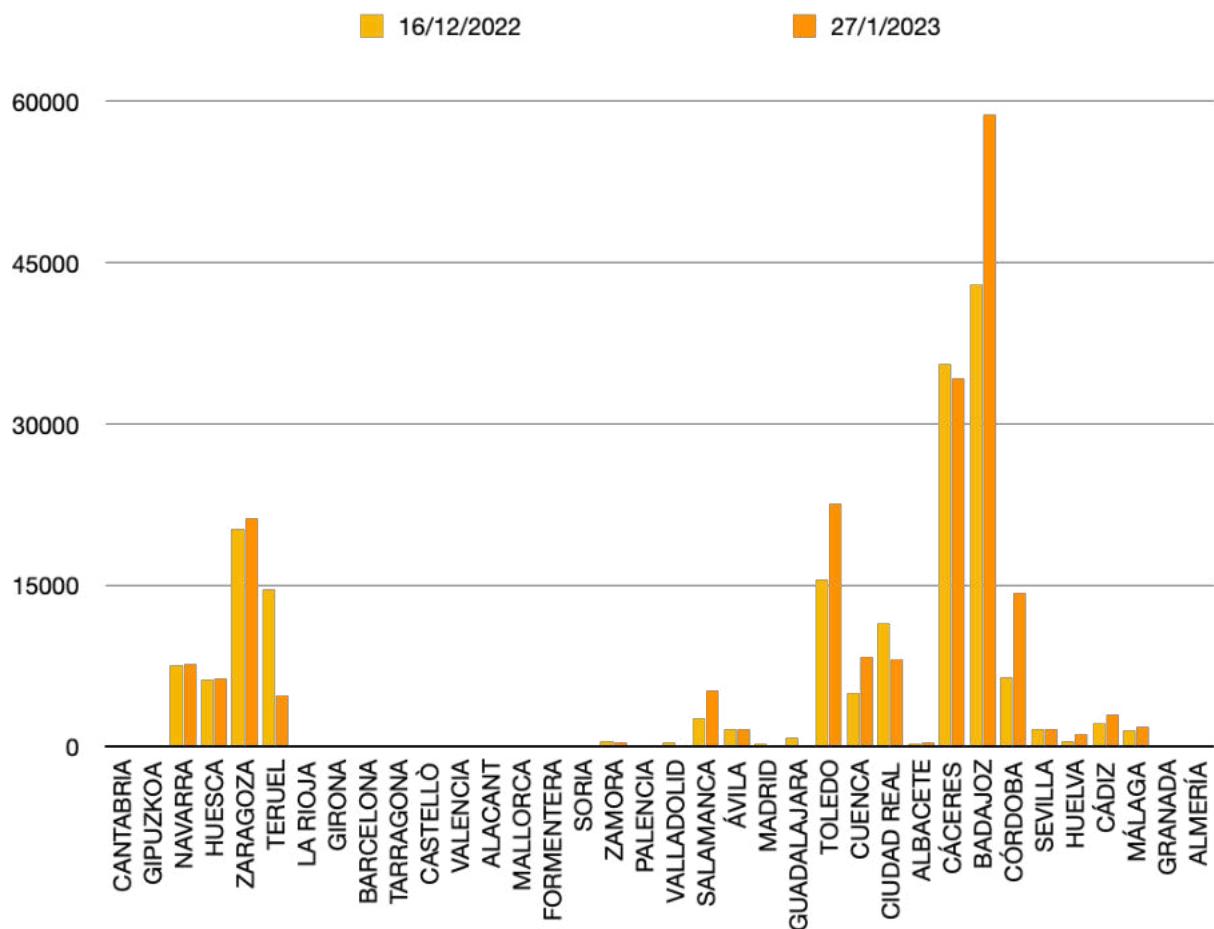


Map nº 29: Provincial distribution of cranes during January.



Graphic nº 27: Provincial distribution of cranes during January.

There were hardly any changes during the whole winter in Navarra, as well as in Huesca; there were minor increases in Zaragoza, and in Teruel there was a significant decrease compared to December, with 10,000 birds less; La Rioja also kept almost all its cranes. In Gerona, the number of bird present reduced by half and Tarragona maintained its numbers. They decreased in Valencia and increased in Alicante. There was a slight decrease in Zamora, but the decline was very pronounced in Valladolid and Palencia, while Salamanca doubled its number and Ávila was stable. The presence of birds in Madrid was mainly of migrants, Toledo increased by some 7,000 cranes, Cuenca also increased by more than 3,000 individuals, while they decreased by just over 3,000 in Ciudad Real and increased in Albacete. Cáceres maintained its population, and it increased by 16,000 in Badajoz. Córdoba also increased by 8,000 cranes, numbers were stable in Seville and increased in Huelva by 700 birds; they also increased in Cádiz by 800 birds and by 300 in Málaga, and the pair remained in Granada.

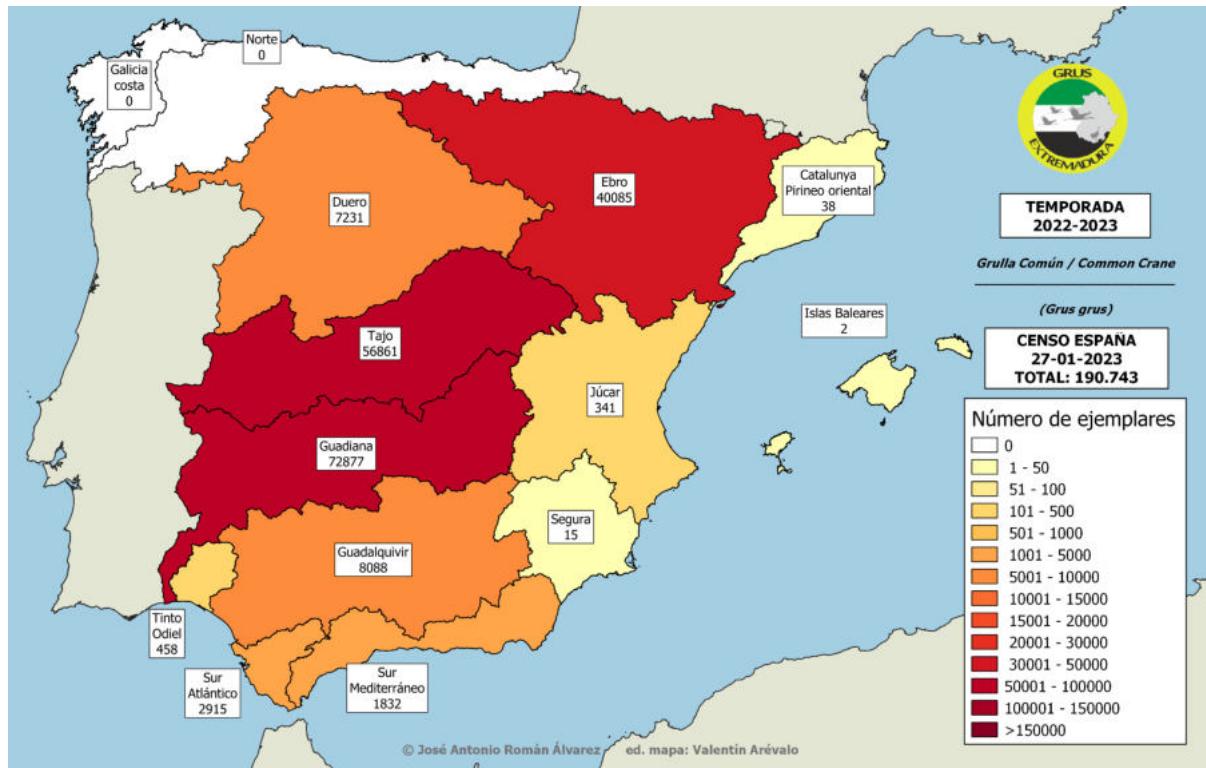


Graphic nº 28: Provincial comparison between the censuses.

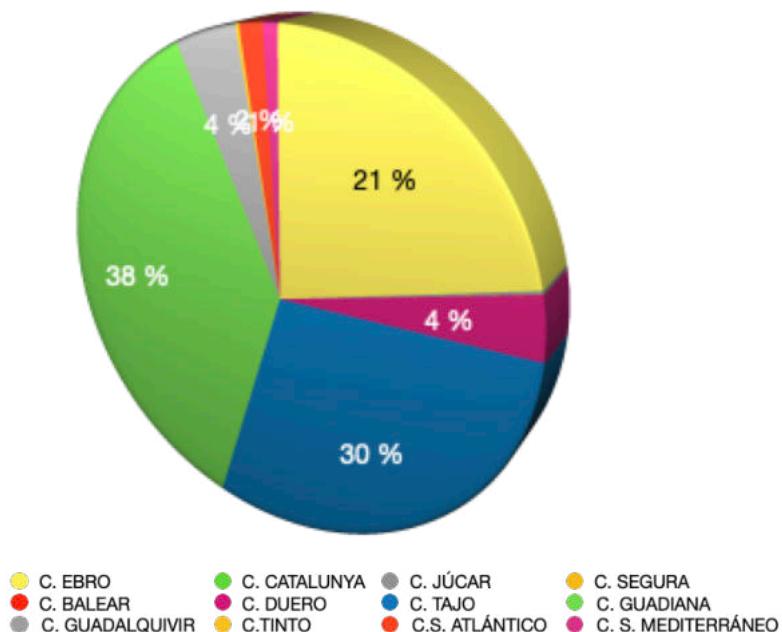
PROVINCE	16/12/2022	27/1/23
CANTABRIA	50	0
GIPUZKOA	76	0
NAVARRA	7514	7645
HUESCA	6223	6308
ZARAGOZA	20260	21222
TERUEL	14624	4789
LA RIOJA	37	31
GIRONA	65	33
BARCELONA	36	0
TARRAGONA	5	5
CASTELLÒ	4	0
VALENCIA	5	1
ALACANT	2	15
MALLORCA	12	2
FORMENTERA	1	0
SORIA	45	0
ZAMORA	543	432
PALENCIA	63	2
VALLADOLID	433	2
SALAMANCA	2636	5216
ÁVILA	1647	1579
MADRID	298	42
GUADALAJARA	875	0
TOLEDO	15458	22616
CUENCA	5024	8340
CIUDAD REAL	11486	8095
ALBACETE	270	340
CÁCERES	35575	34203
BADAJOZ	42896	58766
CÓRDOBA	6402	14325
SEVILLE	1675	1629
HUELVA	479	1198
CÁDIZ	2169	2935
MÁLAGA	1548	1830
GRANADA	3	2
ALMERÍA	1	0

Table nº 2; Provincial results of the censuses in December and January.

By water catchment areas, 40,085 (21%) were counted in the Ebro, 38 (0.01%) in Catalonia, 341 (0.17%) in the Júcar, 15 in the Segura, 2 in the Balearic Isles, 7,231 (3.7%) in the Duero, 56,861 (30%) in the Tajo, 72,877 (38%) in the Guadiana, 8,088 (4%) in the Guadalquivir, 458 (0.2%) in the Tinto, 2,915 (1.5%) in the South Atlantic and 1,832 (1%) in the South Mediterranean.



Map nº 30: Crane distribution by water catchment area during January.



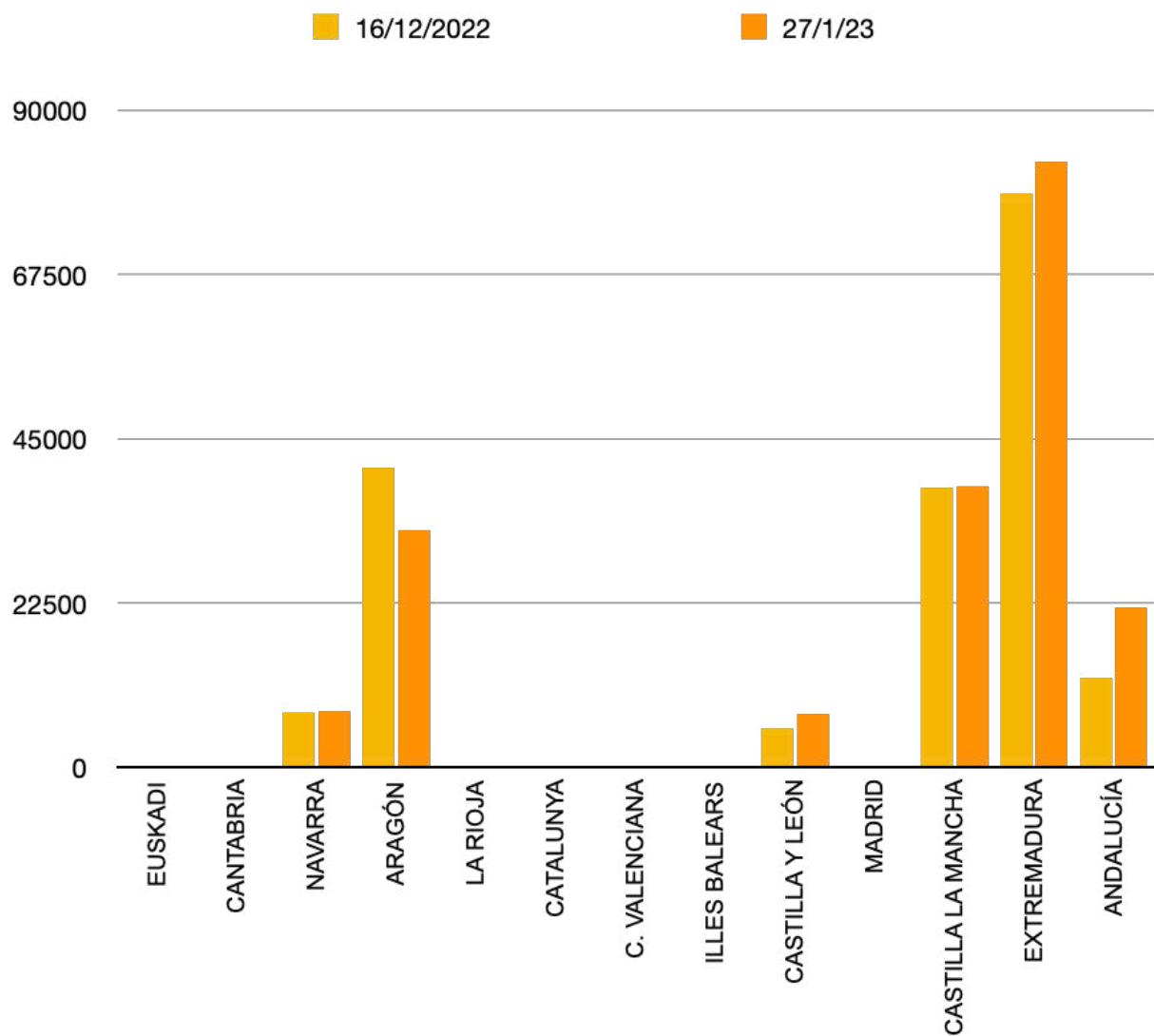
Graphic nº 29: Crane distribution by water catchment area during January.

Comparing the two censuses by water catchment area, the North registered no cranes in January; the birds in December were on migration.

In the Ebro catchment area, the population reduced by 8,000 individuals in January compared to December, and they decreased in the Catalonia and Balearic Isles catchment areas, increasing in the Júcar and Segura areas.

Cranes increased by 2,000 in the Duero, were stable in the Tajo, and increased by 8,000 in the Guadiana.

They increased in the Guadalquivir, by 5,000 cranes, and they also increased in the Tinto, South Atlantic and South Mediterranean.



Graphic nº 30: Comparison of the censuses by water catchment areas.

WATER CATCHMENT AREA	16/12/2022	%	27/1/23	%
C. NORTH	126	0.06	0	
C. EBRO	48658	27	40085	21
C. CATALONIA	106	0.05	38	0.01
C. JÚCAR	279	0.15	341	0.17
C. SEGURA	2	0	15	0
C. BALEARIC ISLES	13	0	2	0
C. DUERO	5367	3	7231	3.7
C. TAJO	57230	31	56861	30
C. GUADIANA	64430	35	72877	38
C. GUADALQUIVIR	3429	2	8088	4
C. TINTO	292	1.6	458	0.2
C. SOUTH ATLANTIC	2169	1.2	2915	1.5
C. SOUTH MEDITERRANEAN	1552	1	1832	1
SPAIN	183543		190743	

Table n° 3: Comparison of the censuses by water catchment areas.

Evolution of the wintering population by Autonomous Community and provinces

THE BASQUE COUNTRY AND CANTABRIA

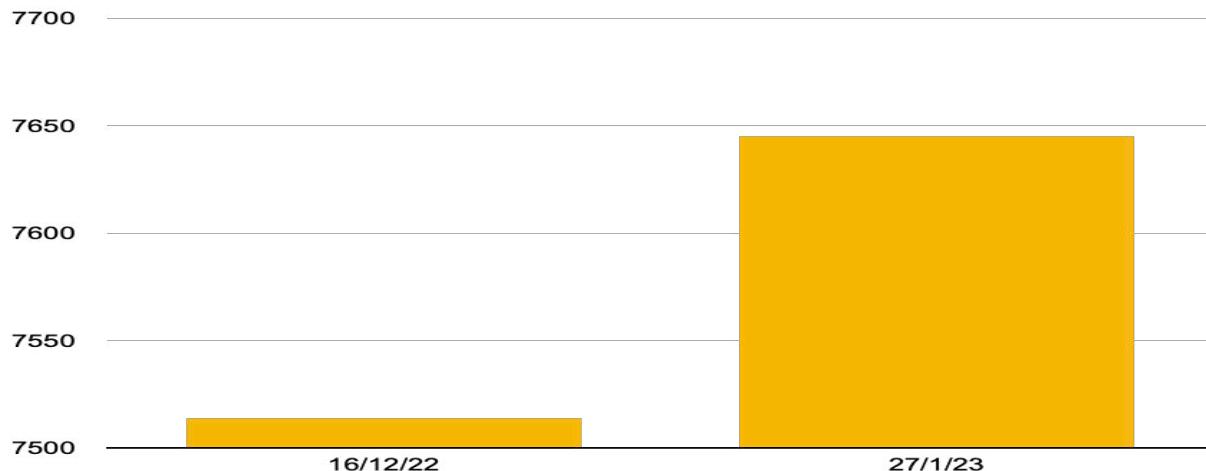
76 cranes were counted in Gipuzkoa province in December, and 50 in Cantabria; these birds were on migration and, strictly speaking, were not wintering, which was reflected in the January census.

NAVARRA

8 roosts were censused in Navarra in both periods, counting 7,514 individuals in December and 7,645 in January. 4,884 cranes were counted during December which were crossing the region on migration; however, the number of birds in January was very similar, as those migrants didn't stay but went on to join cranes in neighbouring areas (Aragón). The majority of these wintering birds was concentrated in the Figarol rice fields.

LOCALITY	PROVINCE	MUNICIPALITY	16/12/22	27/1/23
Arguedas rice fields	Navarra	Arguedas	175	580
Figarol/Alera rice fields	Navarra	Figarol and Alera		6104
Dos Reinos lagoon	Nav/Arag	Figarol and Carcastillo	2229	
La Mueda reservoir	Navarra	La Mueda	0	0
Pitillas lagoon	Navarra	Pitillas	226	926
La Zolina reservoir	Navarra	La Zolina	0	0
Las Cañas reservoir	Navarra	Viana	0	0
La Rada rice fields	Navarra	La Rada	0	35
Active Migration			4884	
NAVARRA			7514	7645

Table nº 4: Census comparison for localities in Navarra.



Graphic nº 31: Census comparison in Navarra.

LA RIOJA

37 cranes were counted in La Rioja in December and 31 in January. In the first census half the birds were migrants, and birds were only recorded at Sotos de Alfaro.

LOCALITY	PROVINCE	MUNICIPALITY	16/12/22	27/1/23
Sotos de Alfaro	Logroño	Alfaro	19	31
Grávalos	Logroño	Grávalos	18	
LA RIOJA			37	31

Table nº 5: Census comparison for localities in La Rioja.

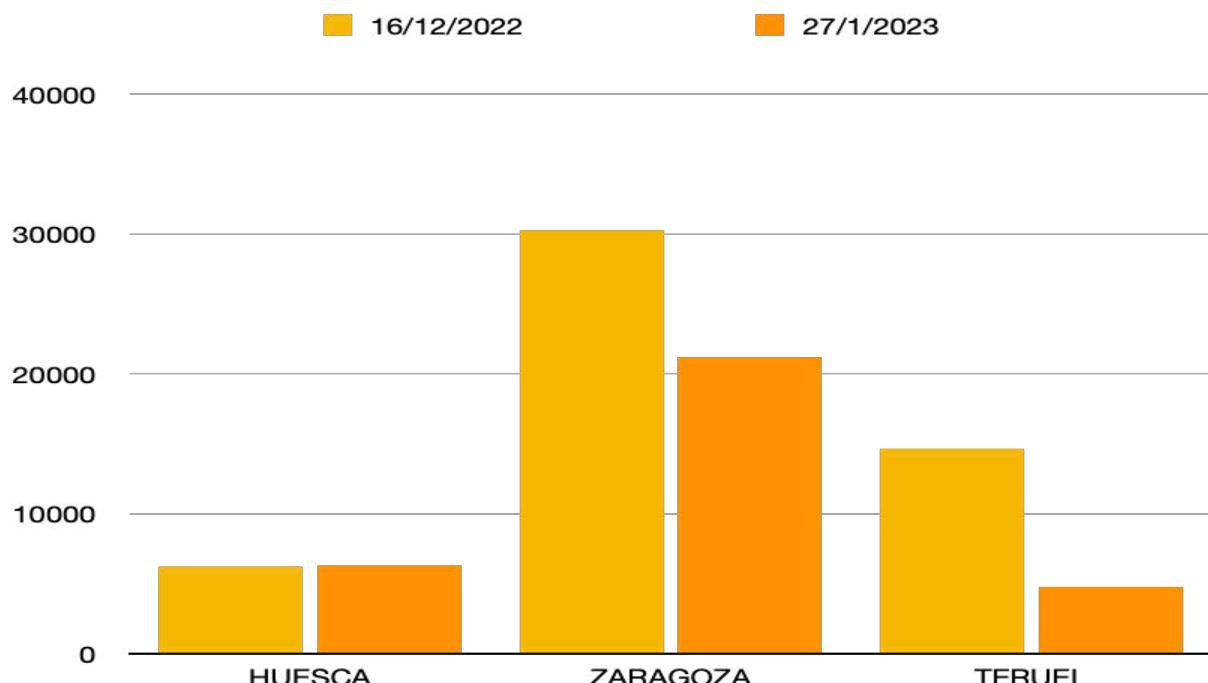
ARAGÓN

41,107 cranes were censused in Aragón in December and 32,409 in January, so there was a decline in the number of birds, which no doubt moved to adjacent areas.

By provinces: 5 localities were censused in Huesca, with 6,223 (15%) birds in December and 6,308 (19%) in January, Sotonera reservoir being the one hosting the most birds, although the number reduced in January, nevertheless the total figure for the province was practically the same.

6 localities were visited in Teruel, and 4,424 (11%) cranes were counted in December and 4,789 (15%) in January, also staying stable.

21 localities were counted in Zaragoza, 30,260 (74%) in December and 21,222 (65%) in January, producing a steep decrease in the second census, all at Gallocanta lagoon, which, although it straddles the provinces of Zaragoza and Teruel, we include it in Zaragoza for practical purposes.



Graphic nº 32: Census comparison for provinces in Aragó

LOCALITY	PROVINCE	MUNICIPALITY	16/12/22	27/1/23
Selgua rice fields	Huesca	Selgua and Monzón		1200
Sotonera reservoir	Huesca	Montmesa	5408	4324
Clamor Vieja	Huesca	Castelflorite	815	690
Santa Lecina rice fields	Huesca	Santa Lecina	0	
El Pas reservoir	Huesca	Valonga		94
Cañizar lagoon	Teruel	Villarquemado and Cella	4600	4671
Alcañiz saline lagoons	Teruel	Alcañiz	15	50
Bezas lagoon	Teruel	Bezas	0	
Lechago reservoir	Teruel	Lechago	9	68
El Becerril lagoon	Teruel	El Pobo de la Sierra	0	0
El Pinar reservoir	Teruel	Rubiales	0	
Gallocanta lagoon	Zarag/Teruel	Gallocanta	18068	8483
La Loteta reservoir	Zaragoza	Pedrola	4784	5001
Plano de Buena Vista	Zaragoza	Ejea de los Caballeros	2770	1060
Valareña	Zaragoza	Valareña	1624	740
Turruquiel-Arana	Zaragoza	Ejea de los Caballeros	1340	0
Tenías reservoir	Zaragoza	Ejea de los Caballeros		837

Valdecenicera	Zaragoza	Quinto de Ebro	235	827
Venta el Esquilao	Zaragoza	Quinto de Ebro	0	
El Cotoz	Zaragoza	Ejea de los Caballeros		1500
El Esclavo	Zaragoza	Ejea de los Caballeros		1325
Malvecino reservoir	Zaragoza	Pinsoro		4
La Zaida lagoon	Zaragoza	Used	0	
El Planerón	Zaragoza	Belchite		0
Santed saline lagoon	Zaragoza	Santed	0	
El Sabinar	Zaragoza	El Sabinar	953	13
Bujaraloz saline lagoon	Zaragoza	Bujaraloz		400
Hoyo de la Cruz	Zaragoza	Bujaraloz	476	787
La Playa saline lagoon	Zaragoza	Sástago	10	
La Tranquera reservoir	Zaragoza	Nuévalos	0	
Saso de Mira	Zaragoza	Tauste		235
ARAGÓN			41107	32409

Table nº 6: Census comparison for localities in Aragón.

ARAGÓN	16/12/2022	27/1/2023
HUESCA	6223	6308
ZARAGOZA	30260	21222
TERUEL	4624	4789

Table nº 7: Census comparison for provinces in Aragón

Regardless of the provinces, we divide Navarra and Aragón into sectors:

-Sector Cinca Medio, situated in the northeast of Huesca province, which includes the localities of Selgua and Clamor Vieja, with 815 (2%) birds in December and 784 (2%) in January.

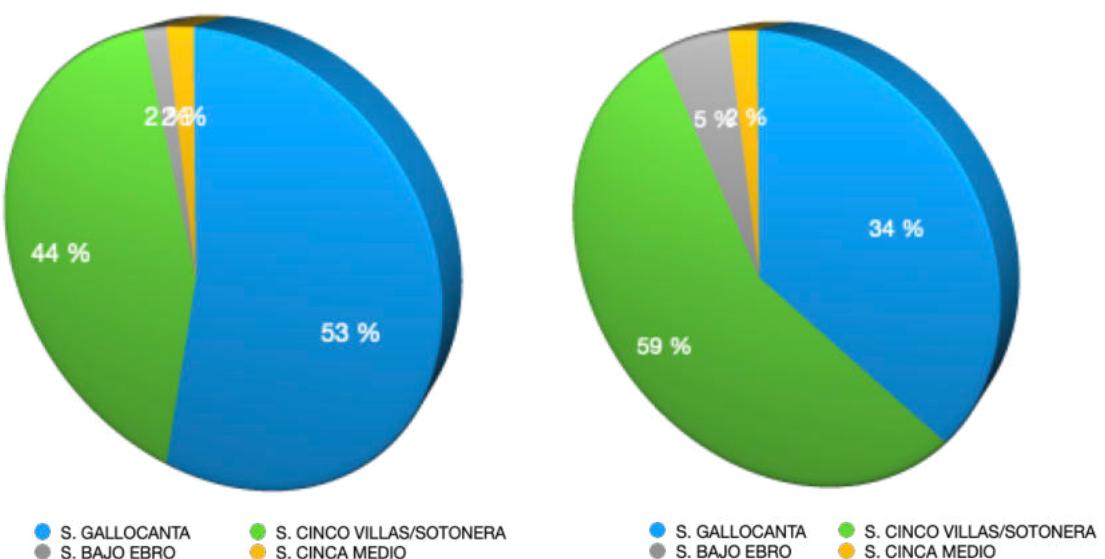
-Sector Cinco Villas & Sotonera, situated in the north-northwest of Aragón and southeast of Navarra and La Rioja, grouping birds that are distributed across the localities of Sotos de Alfaro (LR), Figarol, Arguedas, Pitillas and La Rada in Navarra and Valereña, Sopeña, Turruquiel, La Mueda, Plano de Buena Vista and La Loteta reservoir (Z) and Sotonera reservoir (HU), with 19,509 (44%) in December and 22,756 (59%) in January, increasing in the second census, particularly in Navarra, possibly with birds coming from Gallocanta.

-Sector Gallocanta, located in the southwest of Zaragoza, west-northwest of Teruel and northeast of Guadalajara, taking in the birds at Gallocanta, La Zaida and Santed lagoons (Z), Cañizar and Bezas lagoons, El Pinar and Lechago reservoirs (TE), and the Cuartizo, Llana and Méndez lagoons (GU) with 23,452 (52) in December and 13,222 (34%), which means 10,000 less in the second census, the majority were probably found in Cinco Villas & Sotonera sector.

-Sector Bajo Ebro in the centre of Aragón, spread over Valdecenicera, Hoyo de la Cruz, Santed saline lagoons, Chiprana and Venta el Esquilao, with 736 (1.6%) in December and 784 (2%) in January, so the population remained stable.

NAVARRA-ARAGÓN SECTORS	16/12/2022	27/1/23
S. GALLOCANTA	23452	13222
S. CINCO VILLAS & SOTONERA	19509	22756
S. BAJO EBRO	736	2064
S. CINCA MEDIO	815	784
TOTAL	44639	38826

Table nº 8: Census results in the Navarra-Aragón sectors.



Graphic nº 33: Census comparison in the Navarra-Aragón sectors.

CATALONIA

Cranes were censused in 5 localities in Catalonia in December, although most were birds on passage. Only 2 localities held wintering birds: Aiguamolls de l'Empordà (GI) and the Ebro Delta (T)

LOCALITY	PROVINCE	MUNICIPALITY	16/12/22	27/1/23
Aiguamolls de l'Empordà	Girona	Castelló d'Empúries	11	33
Roses	Girona	Roses	14	
Torroella de Fluvià	Girona	Torroella de Fluvià	40	
Fogars de Montclús	Barcelona	Fogars de Montclús	36	
Ebro Delta	Tarragona	Deltebre	5	5
CATALUNYA			106	38

Table nº 9: Census comparison for localities in Catalonia

COMUNITY OF VALENCIA

Some migrating birds were also detected in the Community of Valencia during December, and only El Hondo (A) recorded wintering cranes.

LOCALITY	PROVINCE	MUNICIPALITY	16/12/22	27/1/23
Moros marsh	Castellon		4	
Almenara marsh	Castellon	Xilxes	0	0
Nules marsh	Castellon	Nules	0	
Sant Mateu lagoon	Castellon	Sant Mateu	0	
La Jana lagoon	Castellon	La Jana	0	
Sant Jordi reservoir	Castellon	Sant Jordi	0	
Mijares estuary	Castellon	Almazora	0	
l'Albufera nature reserve	Valencia	Muntanyeta dels Sants	5	1
El Hondo	Alicante	Elx	2	15
COMMUNITY of VALENCIA			11	16

Table nº 10: Census comparison for localities in the Community of Valencia.

BALEARIC ISLES

Migrating cranes were detected in December in the islands, including Formentera, but wintering birds were only observed in the s'Albufera de Mallorca nature reserve.

LOCALITY	PROVINCE	MUNICIPALITY	16/12/22	27/1/23
Salobrar de Campos	Mallorca	Campos	8	
s'Albufera nature reserve	Mallorca	Muro	4	2
Estany Pudent	Formentera	Es Pujols	1	
BALEARIC ISLES			13	2

Table nº 11: Census comparison for localities in the Balearic Isles.

CASTILE-Y-LEÓN

In Castile-y-León 22 localities were censused in December: 1 in Soria, 2 in Palencia, 1 in Zamora, 4 in Valladolid, 4 in Ávila and 9 in Salamanca. 5,168 were counted in December and 7,231 in January.

No birds were recorded in Soria in January, and only 2 in Valladolid and Palencia. At Villafáfila, the number of wintering birds was 543 in December and 432 in January. Ávila kept its number of individuals, with 1647 in December and 1579 in January. Salamanca doubled its quantity of cranes, with 2,636 birds in December and 5,216 in January, particularly at Riolobos weir and Santa Teresa reservoir, with stable populations at Sancti Spiritus, Yeltes and Sando.

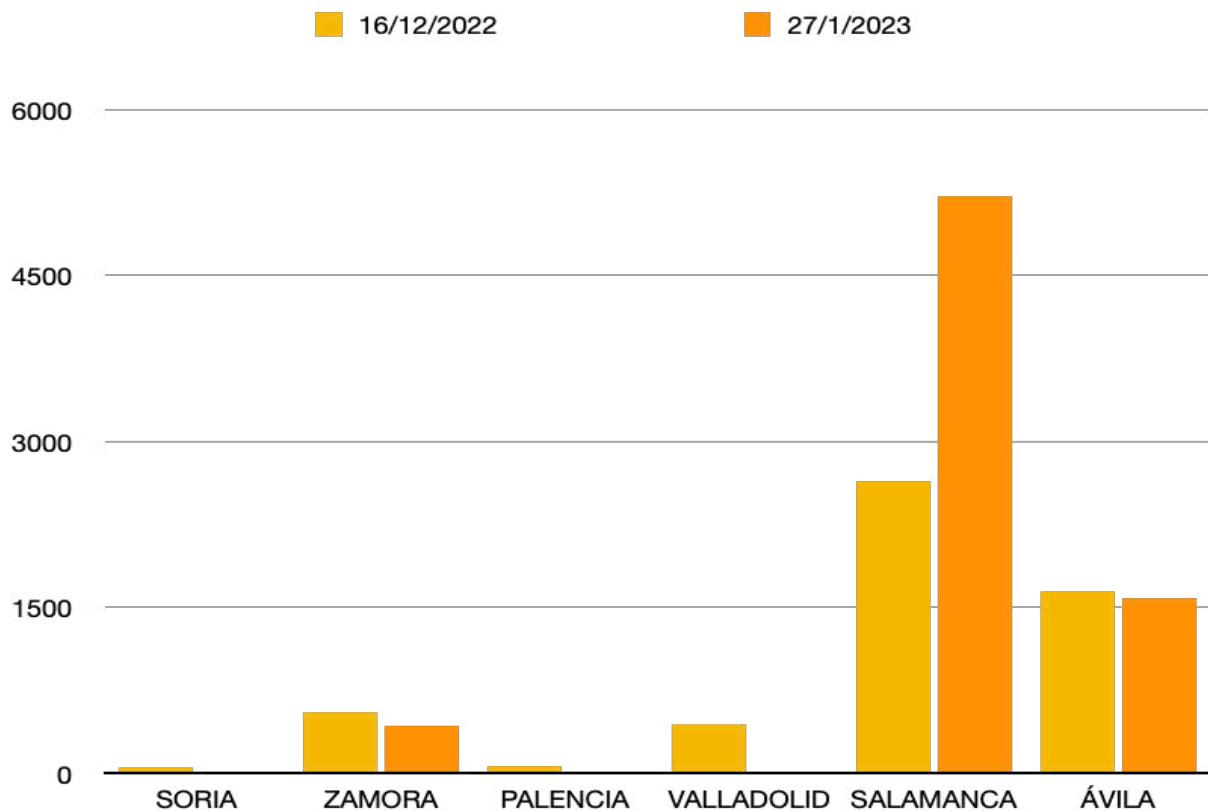
In general, this community very regularly maintains its wintering population over the years, with around 6,000/7,000 birds, and there is a continual interchange of individuals between the different localities of Zamora, Valladolid and Palencia, being able to use some roost sites temporarily. There may also be interchanges between the weir and some other localities. Nevertheless, the El Hoyo lagoon is a regular wintering location for some birds, which pass the entire winter there, demonstrated through reading rings. Something similar must happen with the populations associated with the dehesas of Sando, Yeltes and the Santa Teresa reservoir.

CASTILE-Y-LEÓN	16/12/2022	27/1/2023
SORIA	45	0
ZAMORA	543	432
PALENCIA	63	2
VALLADOLID	433	2
SALAMANCA	2636	5216
ÁVILA	1647	1579

Table nº 12: Census comparison for provinces in Castile-y-León

LOCALITY	PROVINCE	MUNICIPALITY	16/12/22	27/1/23
Soria	Soria	Soria	45	
La Nava lagoon	Palencia	Fuentes de Nava, Maza	56	2
Boada de Campos lagoon	Palencia	Boada de Campos	7	0
Villafáfila lagoon	Zamora	Otero de Sariegos, Villafáfila	543	432
La Zarza lagoon	Valladolid	La Zarza	160	0
Los Mullidores lagoon	Valladolid	Lomoviejo	15	2
La Colada lagoon	Valladolid	San Vicente del Palacio	258	0
El Hoyo lagoon	Ávila	El Oso	795	1083
Garganta Santa María	Ávila	Candeleda	SD	496
Rosarito Norte	Ávila	Candeleda	653	
El Rincón reservoir	Ávila	Candeleda	199	
Santa Teresa reservoir	Salamanca	Montejo, Salvatierra, Pelayos, La Tala	1302	2860
Riolobos weir	Salamanca	Campo de Peñaranda, Villar Gallimazo	1116	2000
Campo pool	Salamanca	Sando	60	119
Sancti Spiritus	Salamanca	Sancti Spiritus	6	34
El Cristo lagoon	Salamanca	Aldehuela de Yeltes		10
Las Porciones pool	Salamanca	Boada	45	
Tamames	Salamanca	Tamames	4	
Francos gravel pits	Salamanca	Machacón	24	
River Almar estuary	Salamanca	Garcihernández	8	
Lavajares lagoon	Salamanca	Rágama	71	193
CASTILE-Y-LEÓN			5168	7231

Table nº 13: Census comparison for localities in Castile-y-León.



Graphic nº 34: Census comparison for localities in Castile-y-León.

COMMUNITY OF MADRID

In this Community, the crane records are of migrating birds, although it seems to have held a small population in the dehesas around El Pardo reservoir. 298 birds were counted in December and 26 in January.

LOCALITY	PROVINCE	MUNICIPALITY	16/12/22	27/1/23
El Pardo reservoir	Madrid	Madrid	10	6
Meco	Madrid	Meco	17	
Leganés	Madrid	Leganés	30	
Rivas Vaciamadrid	Madrid	Rivas Vaciamadrid	88	
Villanueva del Pardillo	Madrid	Villanueva del Pardillo	100	
Sureste regional park	Madrid	Rivas Vaciamadrid		10
Boadilla del Monte	Madrid	Boadilla del Monte	53	
Getafe	Madrid	Getafe		26
COMMUNITY of MADRID			298	42

Table nº 14: Census comparison for localities in Madrid.

CASTILE-LA-MANCHA

Castile-la-Mancha, along with Aragón, is the second most important community for cranes in Spain; some of the populations in Toledo are shared with Cáceres and constitute mixed populations which use roost sites and feeding areas on both sides of the provinces' border. The populations in Toledo are the biggest in the entire region.

38,274 (21%) cranes were censused in December, and 38,472 (20%) in January, maintaining a very stable population regarding the number of birds, although there were changes in their distribution, as they reduced in Ciudad Real and increased in Toledo and Cuenca in January.

44 localities were counted, 5 in Guadalajara, 1 in Albacete, 4 in Cuenca, 14 in Ciudad Real and 20 in Toledo. There were no birds at Guadalajara's lagoons in January, only in December, when there were 875 birds. These lagoons are closely associated with Galloca lagoon, as birds may sleep in Aragón and feed in Guadalajara, or use these as roost sites too.

In Albacete there is only one wintering population, at the saline lagoons at Pétrola and Corral Rubio, with 270 in December and 340 in January. In Cuenca, 5,024 were counted in December and 8,340 in January. Alarcón reservoir's wintering population reduced in January, while the El Hito and Manjavacas lagoons doubled their figures in January.

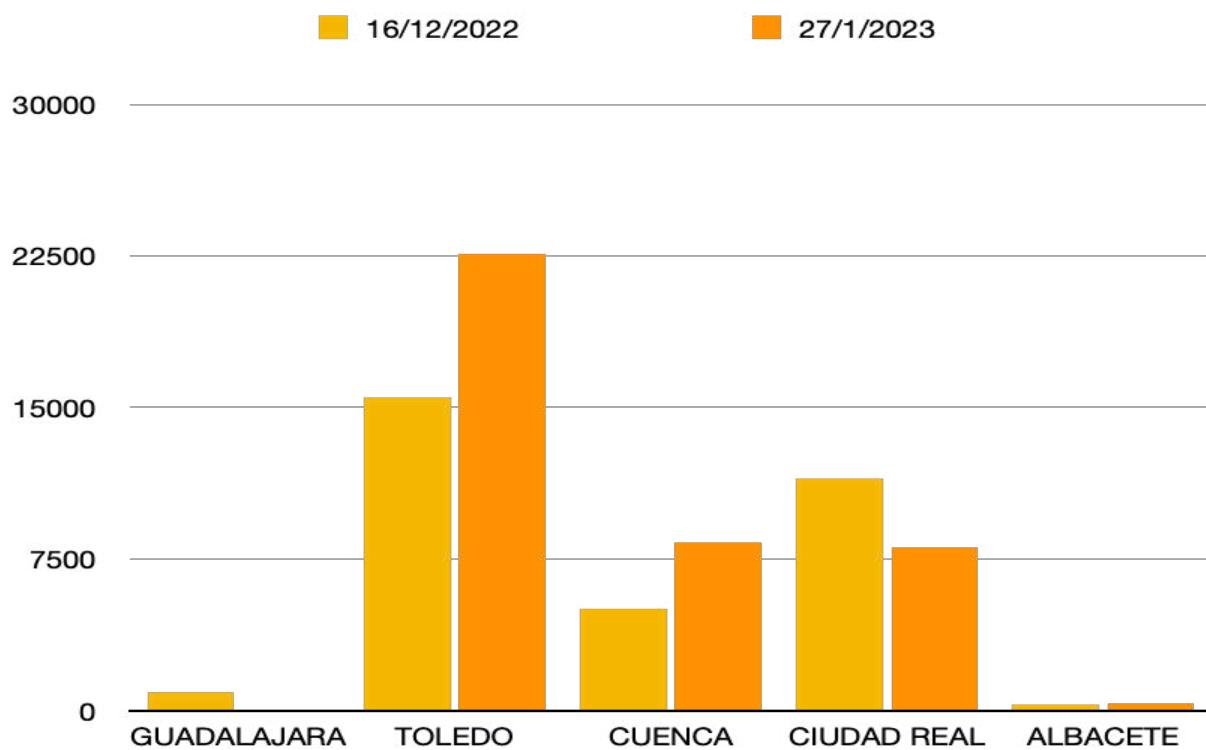
In Ciudad Real, 10,433 were counted in December and 8,095 in January; only Salicor lagoon, of the Alcázar de San Juan population, held a stable population throughout the winter. These seasonal lagoons are highly dependent on the water levels for cranes to use them. In the Tablas de Daimiel the population reduced by half in January, and at Cabañeros the Torre de Abraham reservoir reduced by a third in January, while the number at Las Povedas reservoir doubled.

In Toledo province, 10,433 were counted in December and 22,616 in January, doubling the figure in the second census. It is made up from a population in the east of the province, with Villacañas lagoons and Castrejón reservoir, on the one hand, and the dehesas on the western border with Campo Arañuelo (Cáceres). In the Villacañas sector, the numbers reduced at Tirez and Peña Hueca lagoons, birds moving to Taray lagoon, which went from 0 in December to 2,285 in January, probably because it had acquired water. Castrejón reservoir reduced the number of cranes by a half in January.

In the western dehesas, the roost sites are concentrated at the Rosarito, Navalcán and Tiétar/Buenaventura reservoirs. The first two maintained numbers throughout the winter, and Buenaventura was not censused in December due to access problems caused by the heavy rain. There are other lagoons and farm ponds (El Verdugal, Arroyo Canalejas and El Grullo amongst them) which can't always be censused due to access problems (due to the bad condition of the tracks or for being on private farms that cannot be accessed or for the lack of volunteers). The wintering population is probably greater than we count here.

CASTILE-LA-MANCHA	16/12/2022	27/1/2023
GUADALAJARA	875	0
TOLEDO	15458	22616
CUENCA	5024	8340
CIUDAD REAL	11486	8095
ALBACETE	270	340

Table nº 15: Census comparison for the provinces in Castile-la-Mancha.



Graphic nº 35: Census comparison for the provinces in Castile-la-Mancha.

LOCALITY	PROVINCE	MUNICIPALITY	16/12/22	27/1/23
Cuartizo lagoon	Guadalajara	Campillo de Dueñas	150	SD
Méndez lagoon	Guadalajara	La Yunta	225	SD
Llana lagoon	Guadalajara	La Yunta	400	SD
Buendía reservoir	Guadalajara	Auñón		0
Azuqueca de Henares	Guadalajara	Azuqueca de Henares	100	
Casa Higinio big lagoon	Albacete	Pétrola/Corral Rubio	270	340
Alarcón reservoir	Cuenca	Honrubia, Hontecillas, Valv	1465	464
Manjavacas lagoon	Cuenca	Mota del Cuervo	1929	4556
El Hito lagoon	Cuenca	Montalbo	1540	3320
Buendía reservoir	Cuenca	Buendía, Villalba del Rey	90	0
Villamayor	Toledo	Villamayor		23
Castrejón reservoir	Toledo	La Puebla de Montalbán	5017	3327
Rosarito reservoir	Toledo	Oropesa	7135	7810
Rio Tiétar Buenaventura	Toledo	Buenaventura	SD	2000
La Higuera lagoon	Toledo	Oropesa		357
El Herrero lagoon	Toledo	Las Ventas de San Julián		750
Navalcán reservoir	Toledo	Navalcán	5282	4756
Cazalegas reservoir	Toledo	Cazalegas	65	
Larga lagoon	Toledo	Villacañas	45	
Peña Hueca lagoon	Toledo	Villacañas	744	89
El Taray lagoon	Toledo	Villacañas	0	2285
Tirez lagoon	Toledo	Villacañas	255	0
La Laguna	Toledo	Miguel Esteban	140	
El Verdugal	Toledo	Oropesa	350	200
El Grullo lagoon	Toledo	La Calzada de Oropesa	1562	1100
Arroyo Canalejas	Toledo	La Calzada de Oropesa	SD	SD
Vadoanco & Quero waterlogging	Toledo	Villafranca de los Caballeros/Quero	0	

El Llongar lagoon	Toledo	Lillo	0	0
Madridejos	Toledo	Madridejos	196	
Ugena	Toledo	Ugena	27	
Retuerta del Bullaque	Ciudad Real	Retuerta del Bullaque	125	
Camino Villafranca lagoon	Ciudad Real	Alcázar de San Juan	14	0
Pajares lagoon	Ciudad Real	Alcázar de San Juan	282	77
Salicor lagoons	Ciudad Real	Alcázar de San Juan	563	540
Confluence of Záncara & Cigüela rivers	Ciudad Real	Alcázar de San Juan	5	23
La Veguilla lagoon	Ciudad Real	Alcázar de San Juan	0	0
Los Carros lagoon	Ciudad Real	Alcázar de San Juan	0	
Torre de Abraham reservoir	Ciudad Real	Retuerta del Bullaque	953	698
Las Povedas reservoir	Ciudad Real	Alcoba	749	2089
Tablas de Daimiel	Ciudad Real	Daimiel, Villarrubia de los Ojos	7450	3745
Tirteafuera	Ciudad Real	Tirteafuera	260	
Villamayor de Calatrava	Ciudad Real	Villamayor de Calatrava		58
Valle de Alcudia	Ciudad Real	Almodóvar del Campo	654	865
Ciudad Real	Ciudad Real	Ciudad Real	32	
CASTILE-LA-MANCHA			38274	38472

Table nº 16: Census comparison for the localities in Castile-la-Mancha.

EXTREMADURA

In Extremadura, we visited 30 localities in Cáceres province, 38 in Badajoz province, and 11 sectors which are located, generally, in both provinces. The latter are censused in feeding areas, and 78,521 cranes were counted in December and 92,969 in January.

Although the region comprises two provinces, we divide it into three sectors: Sector Tajo, which covers Cáceres province, Sector Central Zone, which is in the upper Guadiana Valley, in both provinces, and the Sector Guadiana, in Badajoz province.

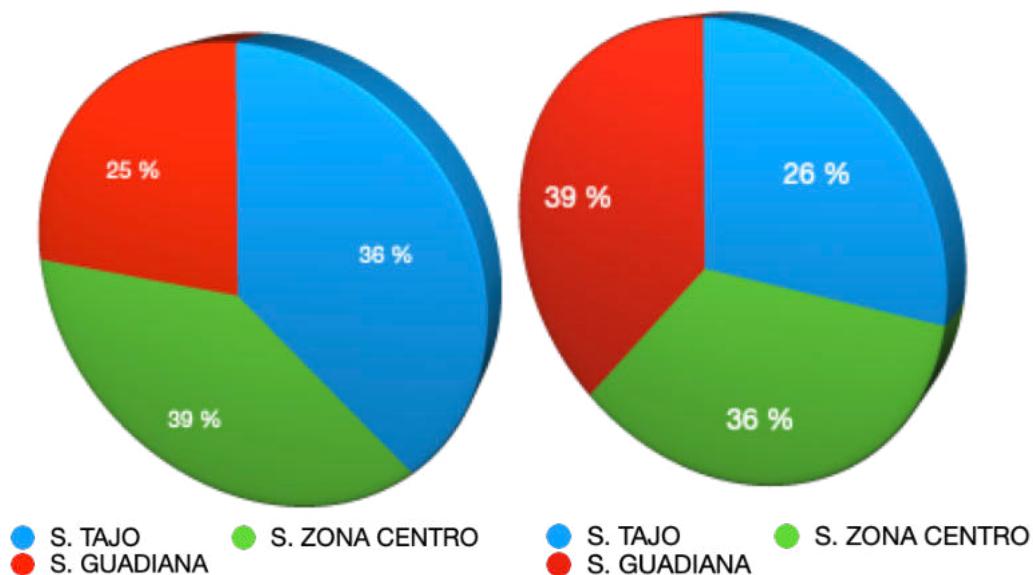
The Tajo sector, with 28,870 (36%) in December, reduced its population moderately in January, to 23,837 (26%), although it should be noted that some roosts could not be counted as there had been several changes because of the rain just before the December census. The Campo Arañuelo area in the northeast of the province is complex to cover due to the quantity of roost sites. Some parts of the traditional Brozas area, in the west of the province, had a significant population increase in January. This is also a complex area to census.

The Central Zone sector, with 31,359 (39%) in December, slightly increased the number of birds in January, to 33,026 (36%). This sector works as a migration corridor and is the most important for wintering, thanks to the abundance of maize and rice stubble; however, these two cereals were not grown in the previous spring due to water restrictions caused by the drought, which led to planting sunflowers (which have little appeal to cranes) and long-cycle cereals, so a significant part of the usual population in this sector moved to habitats with more resources, also taking advantage of recently-sown crops when they arrived.

The Guadiana sector, with 20,242 (25%) in December, considerably increased the number of individuals in January, to 36,106 (39%). This significant change is explained by the large number of cranes that moved to the dehesas, particularly in the La Serena district.

EXTREMADURA SECTORS	16/12/2022	27/1/23
SECTOR TAJO	28870	23837
SECTOR CENTRAL ZONE	31359	33026
SECTOR GUADIANA	20242	36106

Table nº 17: Census comparison for sectors in Extremadura.



Graphic nº 36: Comparison for sectors between December and January in Extremadura.

LOCALITY	PROVINCE	MUNICIPALITY	16/12/22	27/1/23
El Borbollón reservoir	Cáceres	Santibáñez el Alto	7519	5200
Portaje reservoir	Cáceres	Torrejoncillo	56	
Gabriel y Galán reservoir	Cáceres	Zarza de Granadilla	2511	1831
La Fresnera reservoir	Cáceres	Toril		60
River Tiétar	Cáceres	Jaraiz De la Vera		95
River Tiétar-Monfragüe	Cáceres	Malpartida de Plasencia	204	1014
Palancoso lagoon	Cáceres	Navalmoral de la Mata	6360	3200
Las Veguillas reservoir	Cáceres	Jaraiz de la Vera	2	
Cerro Alto reservoir	Cáceres	Saucedilla		2200
Valdecañas reservoir	Cáceres	Peraleda d la Mata, El Gordo	3042	350
Herreruela	Cáceres	Herreruela	100	300
Salorino	Cáceres	Salorino	15	120
Villa del Rey	Cáceres	Villa del Rey		164
Dehesa de Solana	Cáceres	Herrera de Alcántara	5	2
La Clavería pond	Cáceres	Membrío	200	846
Brozas	Cáceres	Brozas	2091	443
Petit reservoir	Cáceres	Arroyo de la Luz		13
Casar de Cáceres reservoir	Cáceres	Casar de Cáceres	42	7
Guadiloba reservoir	Cáceres	Cáceres		24
Talaván reservoir	Cáceres	Talaván	67	73
Cuartón/Tejarejos reservoir	Cáceres	Monroy	968	1765
Las Seguras	Cáceres	Cáceres	438	1101
Valdesalor/La Generala	Cáceres	Cáceres	1327	1633
Aldea del Cano reservoir	Cáceres	Aldea del Cano	1038	826
Campazo pond	Cáceres	La Aldea del Obispo	62	264
River Tozo/Labradillo	Cáceres	Torrecillas de la Tiesa	813	620
Arroyo Casillas reservoir	Cáceres	Trujillo	0	0
Valle Judío	Cáceres	Zorita/Logrosán	940	653

Marinejo reservoir	Cáceres	La Aldea del Obispo		120
Sierra Brava reservoir	Cáceres	Zorita/Logrosán		913
Almansa, Riv. Guadalupejo	Badajoz	Valdecaballeros	1169	1450
Recula, Orellana reservoir	Badajoz	Talarrubias	184	262
Recula, Guadalemar	Badajoz	Usagre, Bienvenida	1500	2650
Las Bodeguillas	Badajoz	Esparragosa de Lares	630	195
Se. Madrigalejo/Casa Hitos	Cáceres	Madrigalejo/Navalvillar Pela	512	592
Sector Logrosán	Cáceres	Logrosán	3693	6274
Sector Moheda/Vegas Altas	Badajoz	Acedera/Navalvillar Pela	2255	2851
Sec. Rañas-Casas d. Pedro	Badajoz	Casas de Don Pedro	3998	5818
Sector Acedera-Puercas	Badajoz	Acedera/Don Benito	1575	970
Sector Los Guadalperales	Badajoz	Don Benito	1333	278
Sector Palazuelo/La Mata	BA/CC	Valdivia/Madrigalejo	2185	1468
Sector Villar de Rena	Bad/CC	Villar Rena/Campo Lugar	2974	1893
Sector Valdehornillos	Bad/CC	S. Amalia/D.Benito/ Miajadas	4266	3423
Sector Guadámez/Búrdalo	Badajoz	Guareña/Sta.Amilia	5336	5525
Sector Yelbes/Medellín	Badajoz	Medellín/St. Amalia/ Guareña	4430	6785
Cortijo del Zangallón	Badajoz	Villar del Rey, Alburquerque	1635	1290
Dehesa el Cubillo	Badajoz	Puebla de Obando	57	111
La Cuba/Morantes	Badajoz	La Roca de la Sierra	351	509
Prado de Lácara	Badajoz	Mérida	SD	622
Los Canchales reservoir	Badajoz	Mérida	511	5650
Cornalvo reservoir	Badajoz	Mérida	21	66
Valdelagrana	Badajoz	La Albuera	242	453
La Albuera lagoons	Badajoz	Torre de Miguel Sesmero	0	0
El Castillo	Badajoz	Almendral	120	500
El Junco lagoon	Badajoz	La Albuera	0	0
Villalba reservoir	Badajoz	Villalba de los Barros	124	234

Alange reservoir	Badajoz	Alange	882	210
Las Merinillas	Badajoz	Badajoz, Valverde Leganés	542	1024
River Guadiana (Alqueva)	Badajoz	Villarreal	30	1208
Cuncos reservoir	Badajoz	Villanueva del Fresno	953	532
Alqueva (Friegamuñoz) reservoir	Badajoz	Cheles, Vva. Fresno, Olivenza	103	786
Casa Nueva pond	Badajoz	Villanueva del Fresno		127
Cabriles stream	Badajoz	Cheles	125	94
La Guarda	Badajoz	La Guarda	SD	200
Las Torralbas	Badajoz	Magacela	SD	455
Badija North	Badajoz	Campanario	198	860
Badija East	Badajoz	Quintana de la Serena	1331	3176
Badija west	Badajoz	Quintana de la Serena	70	
Puerto Mejoral	Badajoz	Castuera	597	1283
Almorchón	Badajoz	Cabeza del Buey	277	759
Zarza Capilla	Badajoz	Zarza Capilla	581	463
Dehesa Cabeza Almorchón	Badajoz	Cabeza del Buey		365
Capilla	Badajoz	Capilla	456	164
Monterrubio (River Zújar)	Badajoz	Monterrubio de la Serena	SD	46
Cancho Roano	Badajoz	Quintana de la Serena	SD	965
El Rosal reservoir	Badajoz	Peraleda del Zaucejo	1324	2340
Arroyo Conejo reservoir	Badajoz	Berlanga, Higuera Llerena	898	1668
Dehesa de San Pedro	Badajoz	Casas de Reina	370	727
La Osa	Badajoz	Retamal de Llerena	301	377
Matanegra	Badajoz	Usagre, Bienvenida	211	697
Las Navas	Badajoz	Oliva de Mérida	255	255
Los Molinos reservoir	Badajoz	Llera	37	482
San José stream	Badajoz	Hinojosa de Valle	207	
EXTREMADURA			78521	92969

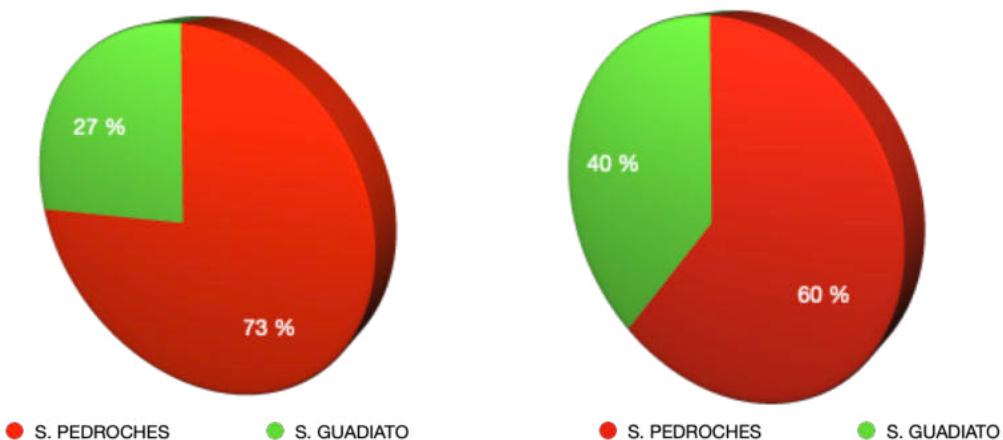
Table nº 18: Census comparison localities in Extremadura.

ANDALUCÍA

In Andalucía we visited 10 localities in Córdoba province, 5 in Seville, 3 in Huelva, 5 in Cádiz, 1 in Málaga and 1 in Granada, although in December there were data of another locality in Granada of a lost bird and of a possible migrant in Almería.

The most important province is Córdoba, with 6,402 (52%) cranes in December and 14,325 (65%) in January, almost tripling the population in that month. This population is distributed across the north of the province, and shares some feeding areas and roost sites with Badajoz. They are spread across two districts: Los Pedroches, in the northeast, in the Guadiana catchment area, and the Upper Guadiato in the northwest, in the Guadalquivir catchment area. The bulk of the population is found in Los Pedroches, but as the winter progresses cranes move into the Upper Guadiato area.

4,648 cranes were counted in Los Pedroches in December, doubling the population in January with 8,646 individuals. In the Upper Guadiato, they went up from 1,754 cranes in December to 5,679 in January.



Graphic nº 37: Census comparison of Los Pedroches and Alto Guadiato.

In Seville province 1,675 cranes were counted in December and 1,629 in January, showing a stable population. They were nearly all in Doñana National Park, with some at the La Lentejuela lagoons and others.

479 were counted in Huelva in December and 1,198 in January. This increase occurred in the Doñana area, as the populations of the Tinto and Odiel rivers remained stable.

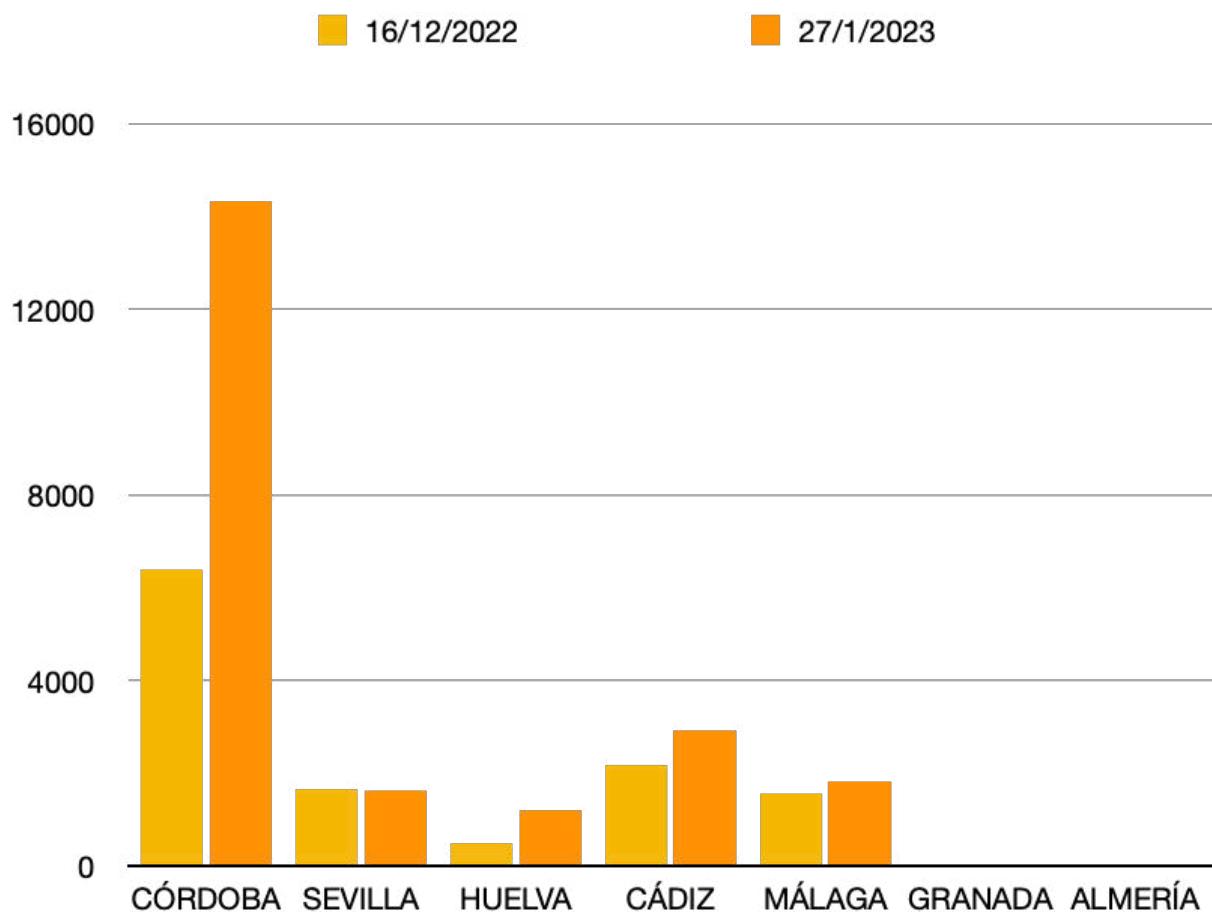
In Cádiz, 2,169 were censused in December and 2,935 in January. The majority were around La Janda lagoon, although in January some cranes were seen in some saline lagoons and marshes.

At the Fuente de Piedra lagoon in Málaga, 1,548 were counted in December and 1,830 in January.

Granada's only pair stayed in the Baza depression all winter, demonstrating the faithfulness these birds have for their wintering areas.

ANDALUCÍA	16/12/2022	27/1/2023
CÓRDOBA	6402	14325
SEVILLE	1675	1629
HUELVA	479	1198
CÁDIZ	2169	2935
MÁLAGA	1548	1830
GRANADA	3	2
ALMERÍA	1	0

Table nº 19: Census comparison of the provinces in Andalucía.



Graphic nº 38: Census comparison of the provinces in Andalucía.

LOCALITY	PROVINCE	MUNICIPALITY	16/12/2 2	27/1/2 3
la Colada reservoir	Córdoba	El Viso	720	1475
Fuente la Zarza	Córdoba	Hinojosa del Duque	439	381
La Pizarra	Córdoba	Belalcázar	655	2204
Solana de Guadamatilla	Córdoba	Hinojosa del Duque	1644	2499
Jardoso reservoir	Córdoba	Hinojosa del Duque	420	1539
Valhondo reservoir	Córdoba	Hinojosa del Duque	325	430
Cogollarta reservoir	Córdoba	Belalcázar	445	118
Sierra Boyera reservoir	Córdoba	Peñarroya/Pueblonuevo	539	1566
Navalespino reservoir	Córdoba	Los Blázquez	1215	4113
Peñalazorra	Córdoba	La Granjuela	0	0
Dehesa de Bucaré	Sevilla	Alcalá de Guadaira	123	100
La Lanteljuela lagoon	Seville	La Lanteljuela/Osuna	20	45
Calderón Chica lagoon	Seville	La Lanteljuela	120	
Las Turquillas lagoon	Seville	La Lanteljuela/Osuna	0	
Doñana National Park	Seville	Aznalcázar	1412	1484
Doñana National Park	Huelva	Hinojos	187	780
River Odiel	Huelva	Gibraleón	96	41
River Tinto	Huelva	San Juan del Puerto	196	376
La Janda	Cádiz	Tarifa & Vejer de la Frontera	2164	1930
Algaida & Trebujena marshes	Cádiz	Trebujena & Sanlúcar B.	0	70
El Puerto de Santa María	Cádiz	El Puerto de Santa María	5	
Puerto Real	Cádiz	Puerto Real		65
Bonanza salt pans	Cádiz	Sanlúcar de Barrameda	0	850
Fuente de Piedra lagoon	Málaga	Fuente de Piedra	1548	1830
Baza	Granada	Baza	2	2
Motril	Granada	Motril	1	
Punta Entinas	Almería	Punta Entinas	3	
ANDALUCÍA			12279	21898

Table nº 20: Census comparison of localities in Andalucía

CENSUS TEAMS

EUSKADI

Gipuzkoa:

- Marismas de Txingudi: Paul Ortuzar

CANTABRIA

- Ría de San Martín: Chencho Fernández Fernández

- Castro-Urdiales: Jesús Menéndez

NAVARRA: Jesús Mari Lekuona Sánchez (coordinación)

- Arrozales Arguedas: Juan Carlos Lorenzo, Jesús Mari Lekuona Sánchez

- Arrozales Figarol/Alera: Jesús Mari Lekuona Sánchez, David Miqueleiz Cortés

- Laguna de los dos Reinos: Jesús Mari Lekuona Sánchez, David Miqueleiz Cortés

- Laguna de Pitillas: Xabi Urmeneta Martín-Calero, Jesús Mari Lekuona Sánchez,

- Balsa de La Zolina: Raúl Pascual, Montse Gorría

- Arrozales de la Rada: Alberto Artazcoz

ARAGÓN

Huesca:

- Arrozales de Selgua: Eduardo Gracia Fuster

- Clamor Vieja: Eduardo Gracia Fuster, José Damián Moreno Rodríguez Embalse de Sotonera: Silvia Duque Mavilla, Francisco Quesada Gaibar, José Mª Canudo Gavín, Jorge Lardiés Sanromán, Esther Yera Posa

- Arrozales de Santa Lecina: José Damián Moreno Rodríguez, Eduardo Gracia Fuster

- Balsa del Pas: Carlos Perallón Romero, David Ardany Jiménez, Jorge Lardiés Sanromán, José María Canudo Gavín, Silvia Duque Mavilla, Francisco Quesada Gaibar, Auri Araguas Nsue, María Cañas Aparicio

Teruel:

- Laguna de Cañizar: David Mansilla Lanzuela, Emilio Bobed Berdegal, Antonio Torrijo

- Saladas de Alcañiz: Juan Luis Muñoz Pérez, Esther Yera Posa

- Laguna de Bezas: Miguel Ángel Martín Arnau

- Embalse de Lechago: Antonio Torrijo Pardos, Carlos Pérez Naval, Eva Naval Sánchez, Rodrigo Pérez Grijalvo

- Laguna del Becerril: César Izquierdo Tena, Isaac Parra

Zaragoza:

- Laguna de Gallocanta: S.A.R.G.A.: Enrique Pelayo Zueco, Pablo Monroy Martínez, María Pilar Vicente Ballestín, Luis Javier Vicente Ballestín, Iván Martín Fras, Francisco Javier Sampietro Latorre

- Embalse de la Loteta: María Berna Miguel, José Antonio Pinzolas, María Ibáñez Martín

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-Motril: Juan Pérez, Carlos Enrique Sarompas Cazorla

Almería.

-Punta Entinas: Adrián Cobo



Image n° 40º: Census team at the Borbollón reservoir (CC). Photo: Miguel Todón



Image nº 42: Census team at the Sotillo reservoir (CC). Photo: Silvia Duque



Image nº 42: Census team at the Arroyoconejos reservoir (BA). Photo: Andrés Gómez

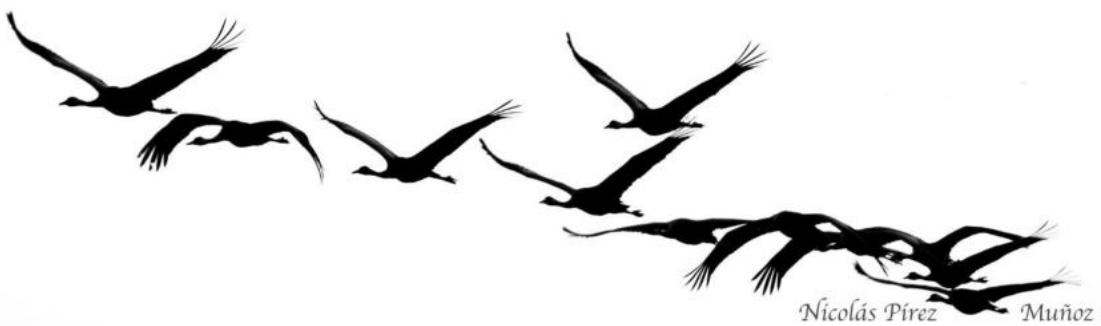


Image nº 43: Group of cranes leaving the roost. Photo: Nicolás Pérez



Image n° 44: The young Marcelo Quesada Vigo participating in the censuses of Pétrola (AB). Photo: Marcelo Quesada

PRODUCTIVITY

We continue collecting information on productivity in different wintering areas. This is collected in the first half of the winter, when the young birds are easily distinguishable from the adults and subadults by their brownish appearance, some darker than others. In the second half their appearance changes and their cheeks begin to whiten and to show the black band on the back of the neck, followed later by the white, the crown colouring in some cases. In this phase they can become unnoticeable in the family group as they become progressively more independent from their parents, particularly the older ones, although even in February some very brown birds can be seen.

Image nº: Young bird at the beginning of winter at the River Búrdalo (BA). Photo: José A. Román.

We have collected data on a total of 22,332 cranes. In Aragón and the area around Gallocanta lagoon (TE/Z) they were collected by Antonio Torrijo and Pilar Edo, at Sotonera reservoir (HU) by Silvia Duque, Francisco Quesada and José María Canudo, at Bujaraloz (Z) by Conchi Escanilla Usón, at the saline lagoons of Alcañiz (TE) by Esther Yera and at Almudévar (HU) by Eduardo Gracia.

In Navarra, around Figarol, they were collected by Jesús Mari Lekouna.

At El Hoyo lagoon in Ávila, they were collected by Arón Blazquez, Cruz González, José María González, Luis J. Martín and Miguel Martín.

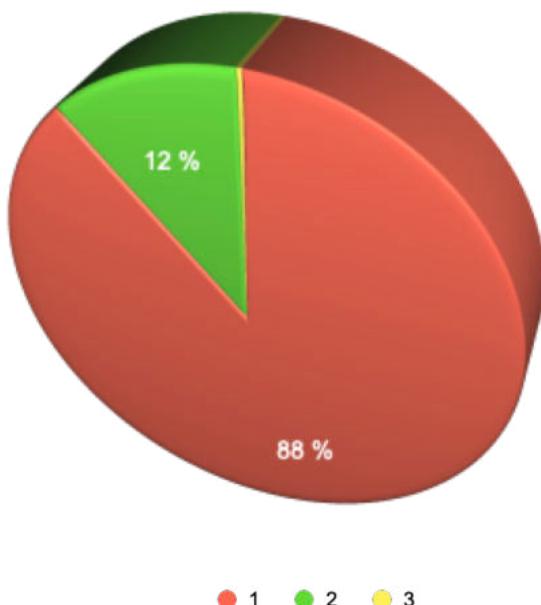
At the River Tinto (H) by José Manuel Méndez.

At Fuente de Piedra and Campillos lagoons (MA) they were collected by Javier Fregenal.

At Moheda Alta, Navalvillar de Pela (BA) Ángel López collected the information, José María Traverso did the same at Valdecaballeros (BA); in the areas around the rivers Búrdalo and Guadiana (Santa Amalia, Yelbes, Don Benito, Medellín, Casar de Miajadas -CC-), Palomas, Oliva de Mérida and Los Cañales reservoir they were collected by José A. Román.

We were able to identify a total of 1,325 families, in which we counted 1,488 juveniles, which gives 11,25 % of the population and the average number of chicks per family is 1.12.

A total of 1,166 families had a single juvenile, making 88%; 155 brought two (12%) and 4 had three juveniles (0.3%), proportions consistent with the previous season.



Graphic nº 39: Percentage of juveniles per family during 2022/2023.



Image nº 45: Family group with two juveniles, in which the shorter tertials can be seen, another characteristic of this age. Photo: José A. Román.



Image nº 46: A juvenile during the intermediate phase, with whitening cheeks and the neck becoming darker. Photo: José A. Román.



Image nº 46: Family group with three juveniles at Villagonzalo (BA). Photo: José A. Román.



Image nº 47: Juvenile at the end of winter (22 February) at Medellín (BA). Photo: José A. Román.

FIDELITY TO THE WINTERING AREA

Cranes are known to be faithful and territorial to their breeding areas, and they show this attitude in their wintering areas. It is known that ringed birds return time and again to the same areas each winter, and not only that, they stay faithful to small plots, even to one holm oak or a group of them, moving according to the availability of food. The knowledge acquired in the first winter with the parents regarding the predictability of food leads these birds to return to the area of their first winter, although until they form a pair-bond they may be nomadic with other immature birds during their early years. Once paired-up and they become parents is when they show more faithfulness to these places, occupying areas close to their parents' area, or even occupying it if it is vacant.

We have seen this in areas such as the dehesas of Los Pedroches, in Córdoba province, where the Finnish crane, known as "*Josefina*" has wintered since 1999, when she travelled for the first time with her parents and sibling. Although her wintering area was not traced for many years afterwards, she was seen at Gallocanta during migration times, until in 2019 Juanma Sánchez found her with her partner and a juvenile in the dehesas of Los Pedroches. He had found her the previous year but couldn't then identify her accurately, when accompanied by two ringed juveniles.

Following a visit by those who had first seen her and named her (Antonio Torrijo and José Miguel Pueyo) other Finnish cranes were seen and thanks to their records they could corroborate that one of her daughters "*Manuela*", born in 2004, was in a nearby parcel of land.

Afterwards it was verified that *Josefina* had been seen in 2001, aged two, in the same dehesas by Rafael Pulido, so she has continued to visit the same parcel since then, including this season, when she stayed until at least 23 February 2023.

In addition, her last chicks ringed, in 2018, have also returned to the area, confirming the fidelity of these cranes to these dehesas. *Josefina* stayed with her partner under the same holm oaks on the same farm, changing according to the land use. It has even been observed that in the roost that they use they usually rest at the same spot each night, so they remain territorial even in the rest areas, particularly when they are experienced and dominant birds, such as these ones.

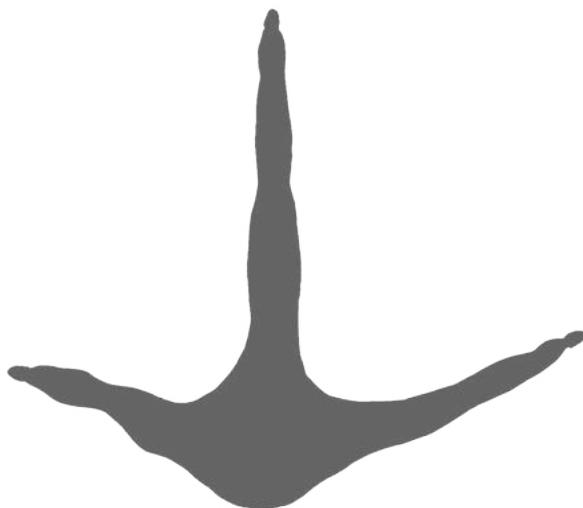




Image nº 48: Josefina and her partner in dehesa, Los Pedroches. Photo: Juanma Sánchez.

This fidelity can also be observed in parcels that aren't in dehesas, in localities completely changed many decades ago, although they may maintain a certain regularity with crops. This is the case with a German crane called "*Isla*". This is a bird ringed in June 2007 in Friedrichsfelde by H.J. Haferland, which I had the opportunity to see for the first time in December 2014 in a parcel near the confluence of the rivers Búrdalo and Guadiana. Since then I have been able to monitor her on the same farm to the present time, and although at times we have seen her in other parcels or nearby localities, she nevertheless remains faithful to the farm whose name she was given. She has not had much breeding success, as we have only known two chicks during these years, including one in 2022. But it is precisely when they have juveniles that they appear to hold a greater attachment to the parcel, so during the current season she has not left the single cropped parcel to feed, in this case sown with beans and partially under water throughout the winter, from 18 November when they were observed for the first time until 12 February. They stayed in exactly the same place, demonstrated by 12 controls made during four months.

It is possible that the chick, if it reaches adulthood, could return to the zone, although this will be difficult to prove as it is not ringed.

I was also able to observe two other pairs which were feeding in neighbouring parcels and were always moving within a small area, recognisable by the distinct colouration of the iris of each one of them.



Image nº 49: "*Isla*" accompanied by her offspring. Photo: José A. Román.



Image nº 50: Neighbouring pair of "*Isla*". Photo: José A. Román.

MARKING AND TRACKING

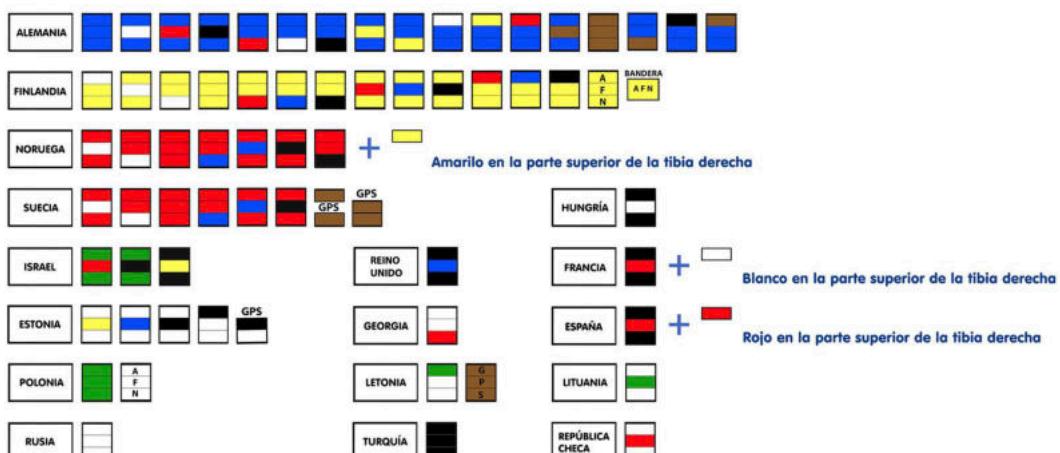
Tracking birds marked with coloured rings, with alphanumeric codes or GPS/GPM, has been done continuously since the sighting of the first Swedish crane which was wearing a red ring with an alphanumeric code. This crane was observed by Víctor M. Pizarro at Las Merinillas pond, Valverde de Leganés (BA) on 7/11/1986.

This Swedish initiative was taken up in Finland and Germany, which chose yellow and blue respectively. Reading these codes is not always easy, having to get close enough to the bird to see the code well. Juan Carlos and Javier Alonso therefore proposed a system of colour combinations which would allow the birds to be identified from a greater distance, assigning a colour of code to each ringing country. This produced a qualitative leap which has allowed us, since then, to identify individuals without needing to get so close to them.

They were also pioneers in using radio-tracking devices which enabled them to know more precisely the movements of the marked individuals, and they began to get to know the migration routes in more detail. The current GPS/GSM tracking systems enable real-time tracking without having to use radio antennas from promontories or small aeroplanes.

The colour combinations have continued evolving from the first six primary colours, to which brown was added in recent years. The Polish stopped using the colour combinations (green) and currently only use a white ring with an alphanumeric code. The Finns introduced alphanumeric codes to their colour combinations, and for the last two years they have also been using large yellow flags which facilitate code-reading, and although these carry two digits on the flag, these have to be completed with the four on the ring, the central pair of which correspond with the flag.

Lectura de anillas de la grulla común (*Grus grus*) - Combinaciones de colores por países



Para saber su país de procedencia debemos fijarnos en la tibia izquierda, en el caso de Francia, España y Noruega también se utiliza para su identificación la primera anilla de la tibia derecha. Además de la combinación de color algunos países como por ejemplo Polonia, usan códigos alfanuméricos (AFN). Suecia incorpora entre sus dos anillas marrones un transmisor GPS.



www.grusextremadura.org

BLANCO	AMARILLO	ROJO	AZUL	VERDE	NEGRO	MARRÓN
W	Y	R	Bu	G	Bk	Br
1	2	3	4	5	6	7
Son 7 los colores empleados.	Abreviaturas de colores.	Códigos numéricos.				

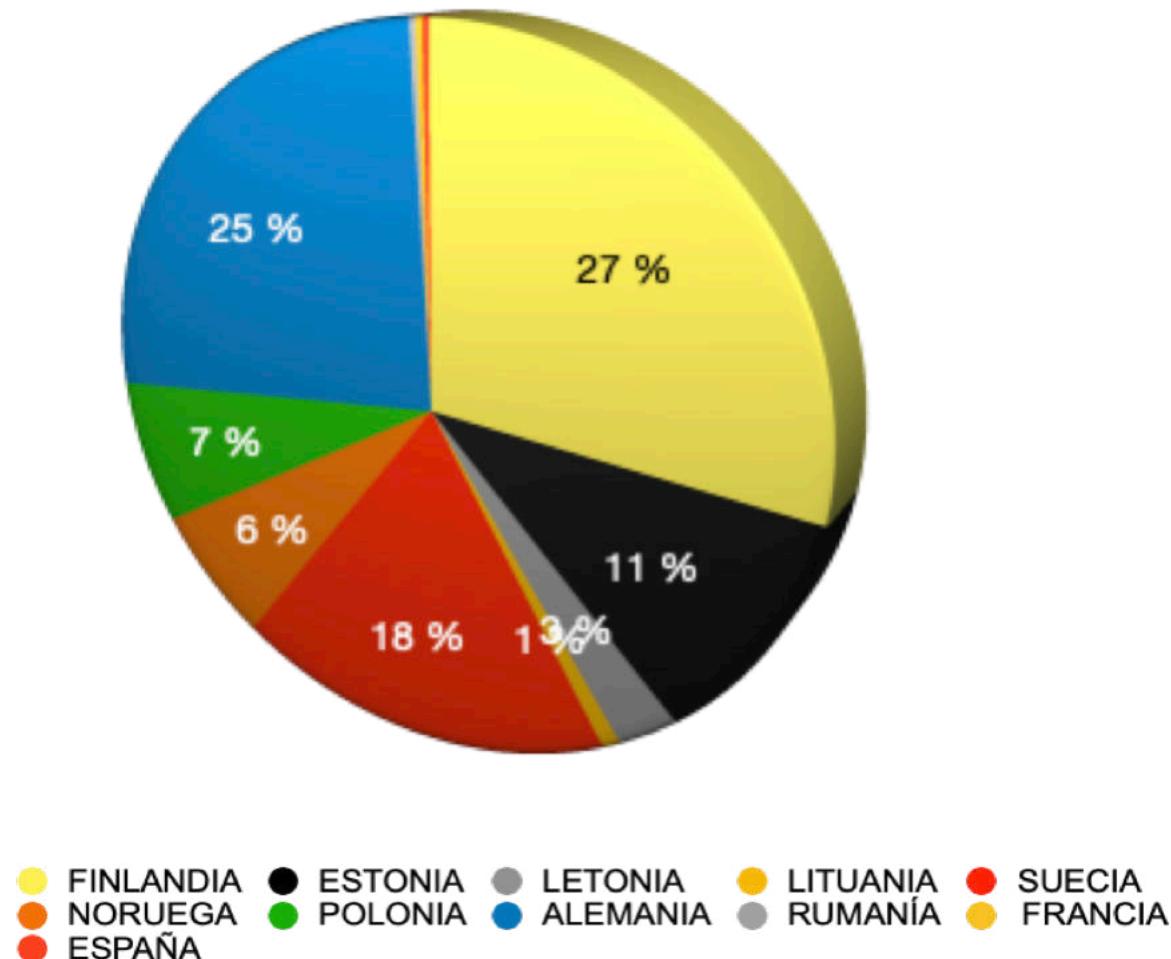
Table nº 21: Colour combinations currently in use.

357 rings were read this season, and 1,046 controls were made, including two made in neighbouring Portugal. 95 of them (27%) were Finnish, 91 (25%) were German, 65 (18%) Swedish, 40 (11%) Estonian, 25 (7%) Polish, 23 (6%) Norwegian, 10 (3%) Latvian, 3 Lithuanian, 1 French, and for the first time, one from Romania. In addition, one crane was marked in Spain, a bird that suffered bruising and could be rehabilitated and released.

19 of them carried GPS/GSM (7 Swedish, 3 Estonian, 3 Lithuanian, 3 Finnish, 2 Polish and 1 German).

Of the Finnish cranes, 12 were carrying flags.

The crane that was controlled the most often was the Finnish bird "Josefina" with 28 observations, 4 at Gallocanta and 24 in Córdoba. Another Finnish crane was seen on 22 occasions in the area around Gallocanta(Z/TE). In addition, a young German crane that wintered at El Oso (AV) was controlled on 18 occasions, and of the cranes wintering in Extremadura, "Isla" was seen on 12 occasions.



Graphic nº 40: Rings read, by country, during the season 2022/2023



Image n° 51: Young Finnish crane bearing a flag. Photo: Putte Andersson.



Image n° 52: Estonian crane carrying GPS/GSM at Villacañas (TO). Photo: Ángel Velasco.



Image nº 53: Estonian crane with very worn spiral rings: WBkWGwy. Photo: José A. Román.



Image nº 54: Finnish crane in Las Vegas del Guadiana (BA). Photo: José A. Román.



Image nº 55: Finnish crane, a regular visitor to Las Vegas del Guadiana. Photo: José A. Román.



Image nº 56: Swedish crane at Palazuelo (BA). Photo: Aurora Caldito.



Image nº 57: Swedish crane with a metallic ring coloured red, but degraded, at Medellín (BA). Photo: José A. Román.



Image nº 58: Latvian crane, Santa Amalia (BA). Photo: José A. Román.



Image nº 59: Polish crane with colour combinations, Santa Amalia (BA). Photo: José A. Román.



Image nº 60: Finnish crane with alphanumeric code, Villagonzalo (BA). Photo: José A. Román.



Image nº 61: Crane ringed in France, at Santa Amalia (BA). Photo: José A. Román.



Image nº 62: Norwegian juvenile, Palomas (BA). Photo: José A. Román.



Image nº 63: Swedish crane in dehesa at Villanueva del Fresno (BA). Photo: Alfonso Pérez.



Image nº 64: Polish juvenile with alphanumeric code at Zarza de Granadilla (CC). Photo: Hugo Sánchez.



Image nº 65: German crane at Figarol (NA). Photo: Jesús Mari Lekuona.



Image nº 66: Estonian crane at Moraleja (CC). Photo: Miguel Todón.

PROBLEMS AND CONSERVATION

-Power lines and wind turbines

The ever-increasing networks of power lines and wind turbines are the biggest cause of death for the species in this country. Unfortunately, we don't have comprehensive records due to the difficulty in finding birds, as they are quickly predated and because no regular or programmed monitoring of these infrastructures are done, therefore information is scarce. Although there are many marked lines, windy days or those with poor visibility, especially foggy days, continue to cause fatal accidents, especially among young birds, the least experienced. These can also happen when they land and miscalculate the landing manoeuvre or when they take flight in feeding areas, particularly if this happens suddenly, on being scared.

In a report from last year (January to December 2022) from the Government of Aragón, there is information relating to 11 young cranes found under a power line, killed by collision; however, based on the data of dead and injured birds taken to the wildlife recuperation centre, there is information of at least 217 cranes killed in collisions with power lines between October 1994 and November 2011, so the total up to December 2022 goes up to at least 225 birds found in 28 years of monitoring by the Government of Aragón. There is no doubt that the number of dead individuals will be much higher than the above figure.



Image nº 67: Cranes landing while avoiding cables, marked with spirals. Photo: José A. Román.

In relation to wind turbines, there is no detailed information either, although at least four individuals have been picked up in the last three years, particularly in the area around La Loteta reservoir (Z), where these megastructures have proliferated significantly. The daily arrival and departure from the roost site at a very windy spot no doubt produces frequent accidents, something which can happen at other locations, such as La Sotonera reservoir

(HU), where they must also cross lines of turbines on leaving the roost or to reach feeding places.

The Government of Aragón's plan, amongst others, involves increasing the number of localities with wind turbines, which represents a significant handicap for cranes in the future, so alternatives to this type of mega-park need to be considered, as this means producing energy not derived from fossil fuels could be more harmful to the species.



Image nº 68: Flock of cranes flying near to a wind farm, at dawn, at Montmesa (HU) reservoir. Photo: José A. Román.

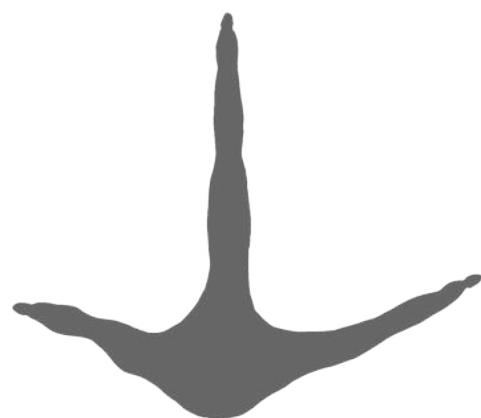




Image nº 69: Cranes arriving at a feeding area after crossing over a wind farm from Sotonera reservoir towards Almudévar, Huesca province.

-Reservoirs and irrigation canals

Cranes usually bathe daily and gather at particular water bodies to roost. It is not infrequent that they go to irrigation canals to bathe, where they may become trapped due to the depth and narrowness of the vessel and may drown. For many years now, reservoirs have been built for irrigation or for extinguishing fires; these are quite deep and have steep sides, some almost vertical, and this, in combination with being covered with a plastic lining, makes it impossible for any animal that gets in to come out of them alive. These reservoirs can attract cranes' attention to rest during migration, and may cause their death, as in one case recorded at a reservoir built for fire extinction purposes in one province of Castile-la-Mancha, where 25 birds were downed, probably during their journey.

The design of these reservoirs should be modified urgently, as well as recommending the aerial closure of irrigation canals to avoid accidents to wildlife and humans.

FESTAS, FESTIVALS AND CONGRESSES

Crane welcome and departure fiestas continue to be held at Gallocanta and in Extremadura, sponsored by the Asociación de Amigos de Gallocanta as well as ADENEX and ANSER, when the birds are arriving or leaving. This type of participative activity attracts aficionados and families, who take the opportunity to enjoy seeing cranes during their daily activities. They are very interesting when they involve the child or youth population, who, in this way, learn to know, enjoy and respect cranes.



Image nº 70: Poster for the 25th Crane Fiesta celebrated at Gallocanta. A.A.G.

DESPEDIDA DE LAS GRULLAS

Observatorio de Aves "Francisco Carbajo"

PUERTO MEJORAL, Benquerencia de la Serena

Sábado, 11 de Febrero, 2023 - 16,30 h.



Image nº 71: Poster for the 31st Crane Departure Fiesta at Puerto Mejoral (BA) sponsored by ADENEX and ANSER.

Single-species festivals about cranes continue to be celebrated too in localities such as Moheda Alta, Navalvillar de Pela, sponsored by the General Directorate of Tourism, where there are participative workshops for children and guided visits to watch cranes, and in the latest edition there was a round table on the evolution of the crane population in the area, coordinated by Grus Extremadura with participation by representatives of the Administration, ADENEX, ANSER and SEO.

Another festival that is becoming established is in the Alcudia Valley, Ciudad Real, which this time was held at Almodóvar del Campo, sponsored by SHNCR and other official and private organisations, where they offered talks and guided visits to observe cranes in this interesting area. We wish them a bright future.



Image nº 72: Posters for the XIV Festival de las grullas at Navalvillar de Pela and the IV Festival de las grullas in the Alcudia Valley.



Image nº 73: Round table at the Crane Festival, Navalvillar de Pela. Photo: José Ángel Sánchez.



Image nº 74: Watching cranes going to their roost in the Alcudia Valley. Photo: Jesús Monroy.



Image nº 75: A talk about cranes by Chema Traverso (*Grus Extremadura*) at the Festival in the Alcudia Valley. Photo: Jesús Monroy.

The *III Jornadas Nacionales de Grullas* (3rd National Crane Conference) was held in the localities of Montmesa and Alcalá de Gurrea, near to Sotonera reservoir in Huesca, organised by the Asociación Alberca de Alboré from 17-19 February. 80 people participated, attending presentations on cranes and avifauna and observing cranes in the area around the reservoir on different routes, as well as reading rings.

In addition to speakers from Huesca, others participated from Gallocanta, Andalucía, Navarra, Extremadura and France, talking about weather and migration, the problems at wind farms during migration through Navarra, the story of the crane "Josefina" and her winters in Los Pedroches, cranes in the national reserve at Arjuzanx, France, and the evolution of the Spanish population of cranes.

They also organised a round table about the convenience of supplementary feeding for cranes in which local farmers participated, providing interesting testimonials about their coexistence with the species.

A highlight was the organisation and hospitality of the locals who volunteered to collaborate and participate in this interesting event.

Programa de las jornadas

Viernes 17 de Febrero
16:00h en el Centro de Interpretación de Montmesa: Recepción, recogida de acreditaciones y observación de grullas.
19:00h a 21:00h en el local social de Montmesa: Ponencias: - "El embalse de la Sotonera", Josechu Marín. - "Biodiversidad de la Sotonera", Juan Carlos Albero. - "Estación de anillamiento de la alberca de Alboré", Nacho Arizón. - "Las grullas como eje cultural y educativo", María Berna. - "Las grullas en tu vida", Irene Marina - "Turismo ornitológico en la provincia de Huesca", Fernando Blasco. - "Birding Aragón, acciones y objetivos" Sandra Fidalgo, coordinadora del proyecto.
Mesa Redonda: "Alimentación suplementaria en las zonas de invernada de la grulla común".

Lugares y ubicación:

Código QR o pincha en él y accede al Link





Sábado 18 de Febrero

8:00h en el observatorio de aves de Montmesa:
Desayuno ofrecido por el "Hotel mirador de las grullas" y observación de la salida en migración de las grullas.

13:00h en el local social de Montmesa, comida ofrecida por "El Cobertizo".
16:00h en el observatorio de aves de Montmesa:
Lectura de anillas y observación de la llegada al dormidero de las grullas.

19:00h a 21:00h en Alcalá de Gurrea, ponencias:
- "Riesgos de la migración de la grulla común por Navarra", Jesús Mari Lekuona.
- "Causas de ingreso en el centro de recuperación de fauna de la Alfranca", José Manuel Sanchez.
- "10 años de censo de grullas en España, evolución de la población", José Antonio Román Alvarez.
- "Influencia de la meteorología en la migración de la grulla común", Antonio Torrijo.
- "Ecología del movimiento", Carlos Camacho.
- "Simbolismo e iconografía de la grulla en el arte de la Península Ibérica a lo largo de la historia. Una aproximación interpretativa", Pilar Edo Hernández.
- "La Grulla Josefina", Juan Manuel Sánchez.
- "Las grullas en Arjuzanx", Sophie Laugareil.

Mesa Redonda: "Marcaje con GPS durante la invernada de la Grulla Común en la Península Ibérica".
22:00h en Alcalá de Gurrea, cena.

Organiza:



Colaboran:



Image nº 76: Programme for the *III Jornadas Nacionales de Grullas*.



Image nº 77: Attendees at the *III Jornadas Nacionales de Grullas*, Montmesa. Photo: Irene Marina.



Image nº 78: Watching cranes at Sotonera reservoir. Photo: Irene Marina.



Image nº 78: Presentations by Juanma Sánchez and Antonio Torrijo. Photos: Irene Marina, José A. Román.



Image nº 79: Presentations by Sophie Laugareil and Jesús Mari Lekuona. Photos: Irene Marina, José A. Román.



Image nº 80: Organising committee. Photo: Irene Marina.

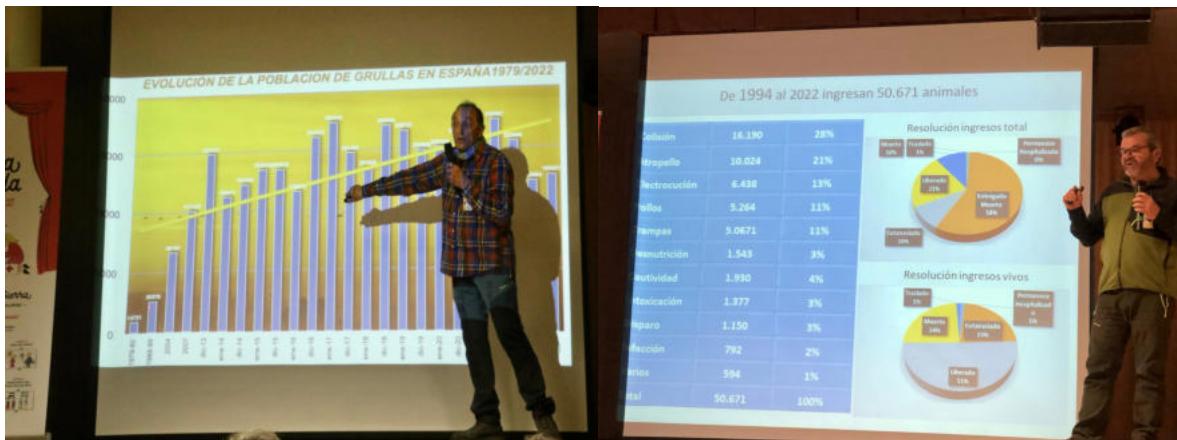


Image nº 81: Presentations by José A. Román and Manuel Sánchez. Photos: Irene Marina y José A. Román.



Image nº 82: Watching the arrival at the roost from the hide at Montmesa. Photo: Irene Marina.



Image nº 83: Guided walk to one of the observation points. Photo: Irene Marina.



Image nº 84: Group photo of participants of the *III Jornadas de Grullas*, Montmesa.

PRE-BREEDING MIGRATION

In the first days of February the first flocks were already being seen migrating northwards:

- 01/02/23: 53 over Daroca (Z) Gonzalo Pérez.
- 03/02/23: 35 over Ayerbe (HU) Pablo Vallés; 10 over Talavera de la Reina (TO); 17 over El Campillo lagoon (M) Antonio Espinosa.
- 04/02/23: 400 over Figueruelas (Z) María Berna; 20 over Villaviciosa de Odón (M) José L. Machuca, M^a José M. Cenamor; 14 over Cañamero (CC) Raquel Lozano, Hugo Sánchez.
- 05/02/23: 83 circling over Cubillo de Ucedo (GU) Carlos Arroyo; 80 over Jirueque (GU) Vicente Peinado; 500 over Buendía reservoir (GU) Ricardo Rodríguez.
- 06/02/23: 214 over Riglos (HU) Pablo Vallés.
- 09/02/23: 31 over Cantalojas (GU) Fernando Gomez (DALMA).
- 10/02/23: 70 set off from Montmesa (HU) Pablo Vallés; 37 over Pamplona (NA) Rajen Ayerra; 150 over Torrejón de Ardoz (M) Mireia A.F.; 56 over Quintanilla del Agua (BU) Israel Yáñez
- 11/02/23: 71 over Sasa de Abadiado (HU) Jorge Lardiés; 60 over Sangüesa (NA) Javi Sola; 63 over La Nava lagoon (P) Fernando Jubete Guzón; 300 set off from Gallocanta lagoon (TE/Z), where 200 arrived, José M. Pueyo; 134 over Santa Bárbara pass, Bailo (HU) Alberto Giménez; 32 over Daroca (Z) Adrián Sánchez; 28+104 over Burgos, Rafael Díez; 93 over Mecerreyes (BU) Javier Otal; 90 over Palacios de la Sierra (BU) Juan I. Martínez.
- 12/02/23: 2 over Campos del Río (MU) Miguel Escudero; 59 over Sigües (HU) Alberto Pastoriza; 150 over Cásedo (HU) Javi Sola.
- 13/02/23: 60 over Torrelodones (M) Laura Ferreyra; 80 over Fresnedillas de la Oliva (M) Juan J. Iglesias; 78 arrive at 19:30h at Beleña lagoon (GU), which several flocks went over during the day, Carlos Paulos (DALMA); 108 over Alto de la Varga (BU) Rafael Díez, César Díez; 125 over Montuenga (BU) Alberto Fernández; 12 over Pedraja del Portillo (VA) Samuel de la Calle; 200 over Villaconejos (M) Susana R.; 30 over Ciempozuelos (M) Edmund Bell.
- 14/02/23: 120 over Simancas (VA) Teresa Tasis; 351 over Quintanilla del Agua (BU) Israel Yáñez; 40 over Páramo del Arroyo (BU) and 5 over Villarmentero (BU) Diego Santamaría, Aitana Barroso; 26 over Miranda de Ebro (BU) José L. Lobo; 110 over Valladolid, Alejandro Rebollo; 130 arrive at 18:34h. at Atapuerca lagoon (BU) Fede Sancho; 200 at Beleña lagoon (GU) Raúl del Amo.
- 15/02/23: 50 over Atapuerca lagoon (BU) Diego Santamaría; 500 over Martiola (AR) Pablo Verona, Mikel Salvador; 55 over Ugena (TO) Javier Gómez; 670 over Montuenga (BU) José M^a Ayuela; 220 over Campos de Rocaforte (NA) Jesús Mari Lekuona, Moises Zozaya; 822 over Alto Sangüesa (NA) Jon Sola; 800 over Sotés (LR) Carlos González.



Image nº 85: Cranes at Atapuerca lagoon (BU). Photo: Fede Sancho

-16/02/23: 150 over Guadalajara, Jesús Alonso; 70 over Marchamalo (GU) DALMA; 180 over Valdetorres de Jarama (M) Luis Carretero, Johnathan Dadds; 400 over Velilla de San Antonio (M) Carlos Guillén; 55 over Barajas airport (M) Evan Bunker; 400 over Velilla de San Antonio (M) Manuel Vega; 170 over Tres Cantos (M) Gustavo Sánchez; 30 over Escoriaza (G) Julen Santa Cristina; 2,000 over Chapinería (M) Jesús Morena; 123 over Roncal (NA); 120 over Valdemorillo (M) Manuel Rodríguez; 23 over Rivas Vaciamadrid (M) Lorenzo García; 100 over Cubas de la Sagra (M); 434 over Valmayor reservoir (M) Manuel Vega, Johnathan Dadds, Carlos Guillén; 50 over Titulcia (GU); 153 at La Guardia lagoon (TO) Juan Parra.

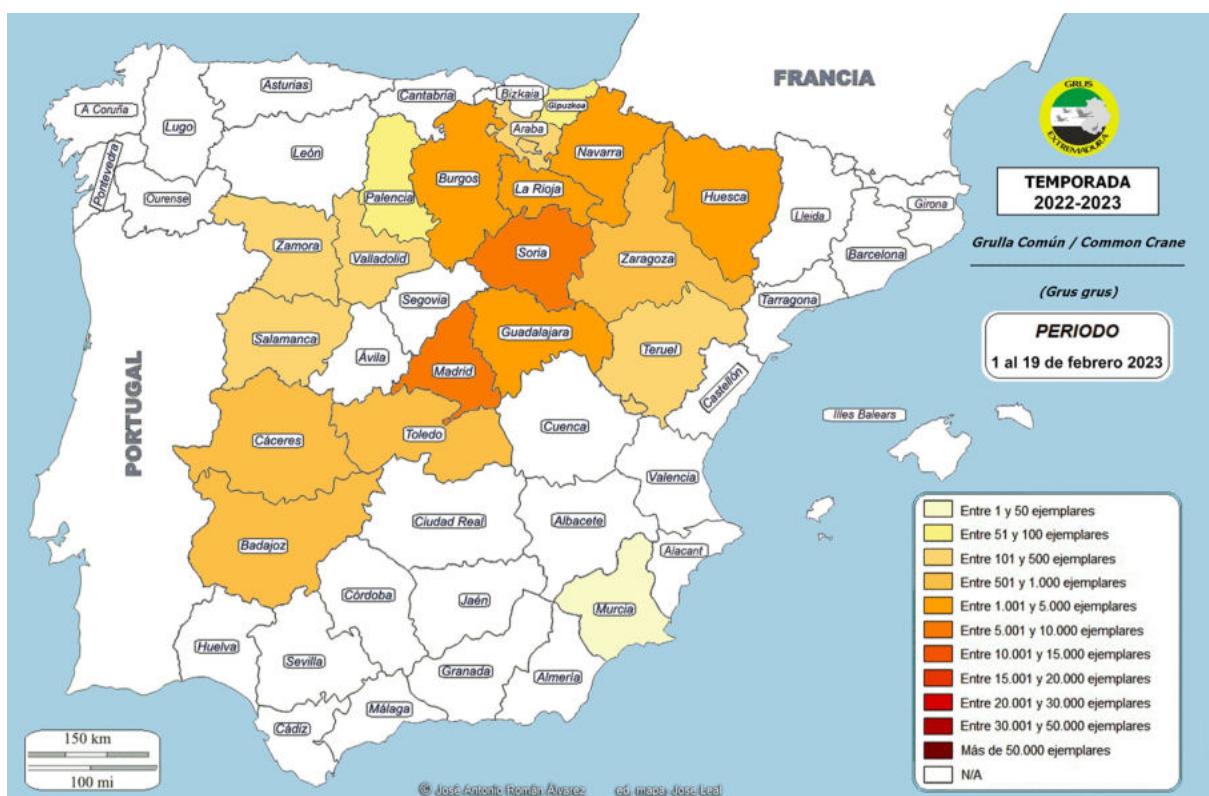
-17/02/23: 5,000 over Chéroles and 2,000 at Monteagudo de las Vicarias reservoir (SO) Ángel Rubio; 120 over Fuensauco (NA) Cruz Sevillano; 180 over La Oliva monastery (NA) Jesús Ucha; 100 over Alfaro (LR) Borja Sanz; 120 over Sotos de Alfaro (LR) Andrés de la Torre; 250 over Arandilla (BU) Víctor Martínez; 650 over La Dehesa park (M) Gema Pérez; 200 over Tomelas (M) María Berna; 150 over Madrid, Christophe Pontegnie; 240 over Velilla de San Antonio (M) Antonio Espino; 120 over Hoyo de Manzanares (M) Carlos Guillén; 110 over La Pedrezuela reservoir, Guadalix de la Sierra (M) Jesús Ruiz; 250 over Las Rozas (M) John Muddeman; 40 over Pioz (GU) Manuel Martínez; 3,500 over Sacecorbo (GU) Javi Gómez; 150 over Alcalá de Henares (M) Sara Piquet; 150 over Pamplona (NA) María Durán; 150 over Garimoain (NA) Héctor Diaz; 675 over Griñón (M) Delfín González; 200 over Arbaiun gorge (NA) and 280 over Alto de Iso (NA) Gorka Gorospe.

-18/02/23: 300 over Berriozar (NA) José Ardaiz; 1,100 at Cubillo lagoon, Cubo de Hogueras (SO) in the morning, 512 at Herrera lagoon, Aldealafuente (SO) and 85 at Guerrera lagoon, Tardajos de Duero (SO) Juan L. Hernández; 300 arrive at Gallocanta lagoon (TE/Z) Carmina Franco; 500 over Calahorra (LR) Jesús Ucha; 30 over Oiartzun (G) Alain Loperena; 190 over Valdetorres de Jarama (M) Alejandro Fernández.

-19/02/23: 42 over Oláriz (NA) Héctor Diez; 40 over El Retiro (M) Chemi Ibáñez; 2,479 set off from Sotonera reservoir (HU), although 974 return, María Berna, Pablo Vallés et al.

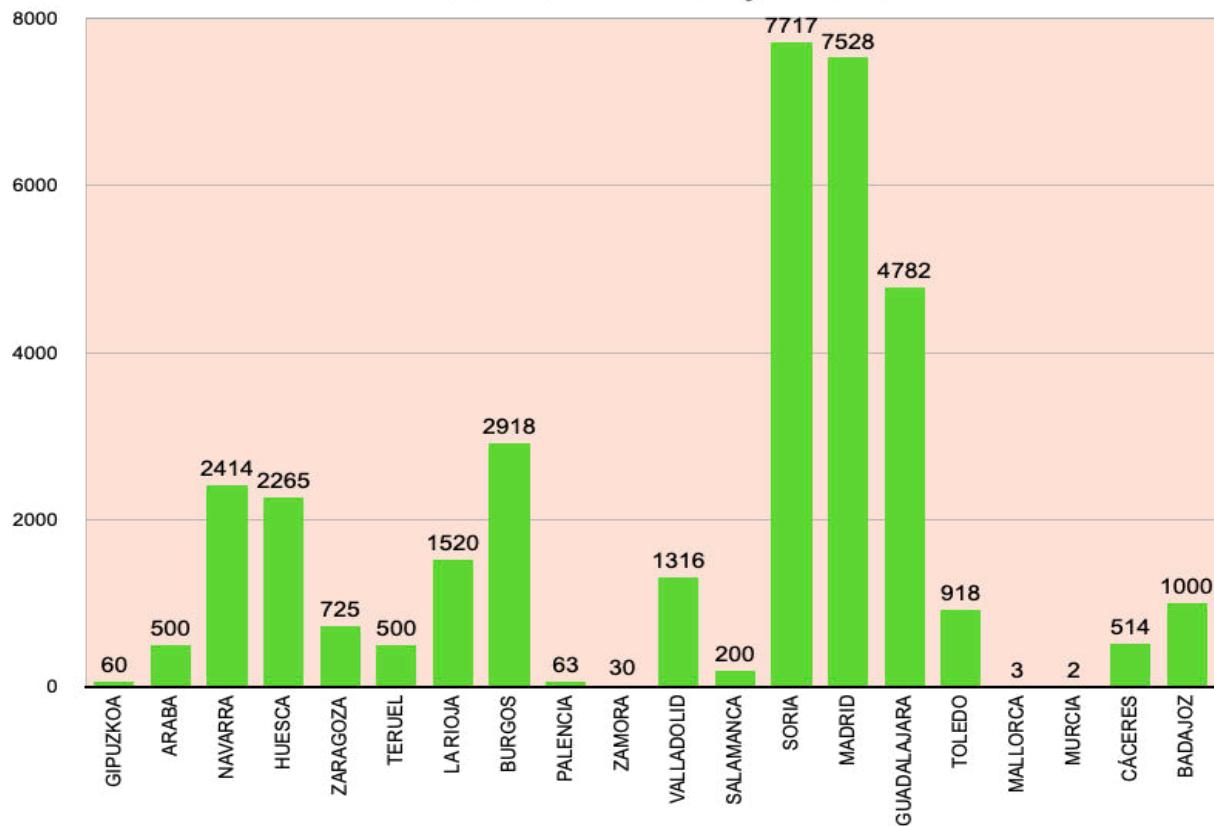


Image nº 86: Flock of cranes taking a thermal to initiate migration at Almudévar (HU). Photo: José A. Román

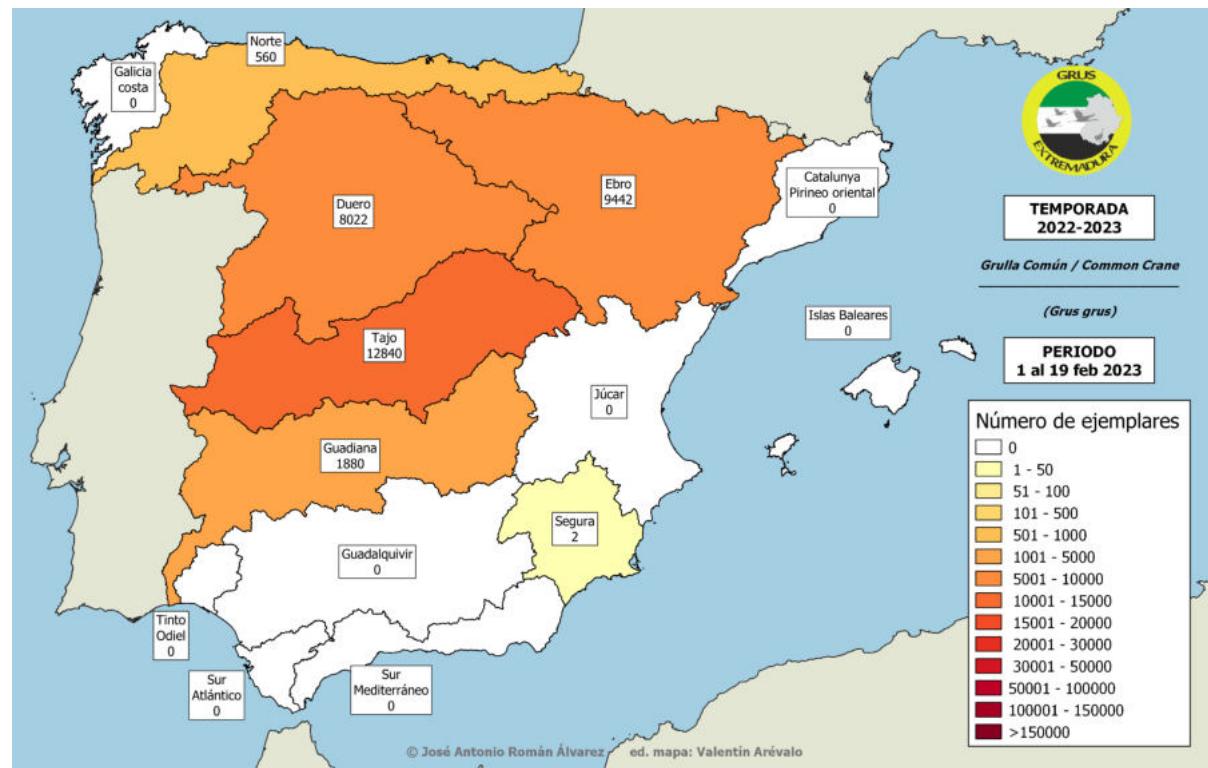


Map nº 31: Provincial migration between February 1 and 19

Week from February 1 to 19

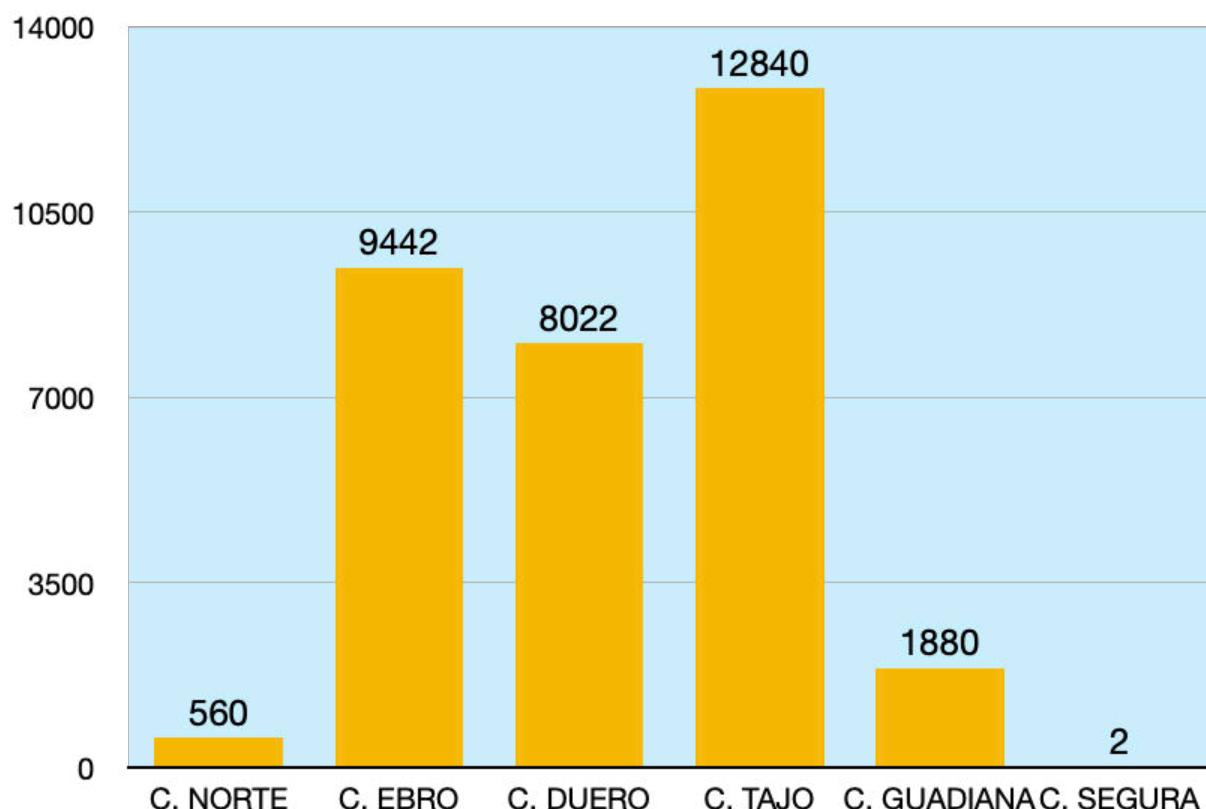


Graphic nº 41: Migration by provinces between February 1 to 19



Map nº 32: Migration by catchment areas between February 1 and 19

Week from February 1 to 19



Graphic nº 42: Migration by catchment areas between February 1 and 19

An intense week for migration, with large movements from the wintering areas towards the north-east, favored by a change in the wind and weather patterns, with an Atlantic front arriving in the second half of the week. The massive departure began on the 21st and continued resolutely to cross the Pyrenees.

-20/02/23: 144 over Agudo (CR) Raquel Ramiro; 200 over Callen (HU) Silvia Duque; 160 over Fuenlabrada (M) Lucía Andrade; 11 over La Nava (P) Fernando Jubete Guzón; 80 over Alfaro (LR) Fede Sancho; 2,000 over Cambrillos del Molino (TO) Javier Nicolau; 323 over Palacios de la Sierra (BU) Rufino Fernández; 960 at La Aldea del Obispo (CC) Neil Renwick; 2 in rice fields at Sueca (V) Toni Alcocer.

-21/02/23: 1,500 migrating over Montánchez (CC) Antonio Calvo, Francisco Lopo; 145 over Badajoz, Gloria López; 100 over Campanario (BA) Manuel Maximiano; 60 over Belalcázar (CO) Pedro; 160 over Mostoles (M) and 115 over the River Guadarrama (M) José A. Román, Luis Asuar; 200 over Tablas de Daimiel National Park (CR) Daniel Merino; 500 over La Casa de Campo (M) Natalia Franco, José A. Sánchez; 100 over El Marqués stream (M) José M. Ruiz; 42 over Navalespino reservoir (CO) Miguel Corvillo; 350 over Villanueva del Pardillo (M) Patricia Alonso; flocks arriving at Gallocanta lagoon (TE/Z) Antonio Torrijo; none leave Sotonera reservoir (HU); 850 over El Pardo (M) Adolfo Rodríguez (GOEP); 90 over Mirandilla (BA) Mariano Cabrero; 500 over Navas del Rey (M) Rubén Bautista; 52 over Agudo (CR) Raquel Ramiro; 300 over Huetos (GU) Fernando Canalejas; 1,800 over Marchamalo (GU) Carlos Paulos (DALMA); 200 over Torralba de los Frailes (Z) Antonio Torrijo; 1,100 over Brihuega (GU) Arón Blázquez, Chema García; 250 over Cabanillas del

Campo (GU) José L. Arias (DALMA); 400 over Navas de Estena (CR) Jacqueline Cartigny; 197 over Bartzán (NA) Xavier Etxarri; around 8,000 arrive at 17:00h at Gallocanta lagoon (TE/Z); 360 over Alonso de Ojeda (CC) Arturo Esteban; 74 over Cornalvo reservoir (BA) José L. Machuca, M^a José M. Cenamor; 100 over Villanueva de Bogas (TO) María Fernández; 500 Olivares (TO) Pepe Buendía; 1,300 over Aranjuez (M) José A. Sánchez; 500 over Las Matas (M) José E. Mateos; 293 over Las Rozas (M) David Guillén, Mónica Carrasco, Fernando Guerrero; 2,530 over La Casa de Campo (M) Mónica Carrasco, José Zamorano, José M^a Paraiso; José Martín, Marce Martín; 180 over Madrid, Gorka Gorospe; 200 over Valdeolmos (M) Paul Huibers; 340 over Cabanillas del Campo (M) Sofía García; 600 over Renera (GU) Susana Alcolea; 4,000 over La Vera (CC) Dave Langlois; 12,250 over Arrocampo reservoir (CC) Seppo Hjerpe; 400 over Lagartera (TO) César Clemente; 1,000 over Velada (TO) Marcos Rodríguez; 300 over Borox (TO) Miguel García; 520 over Madrid, Robert Wilson, Christophe Pontegnie; 450 over Puebla de Beleña (GU) DALMA; 1,350 over Trujillo (CC) Carmen Pérez-Aloe; 1,000 over Madrid, Jesús Risueño; 300 over Meco (M) Lorenzo Rodríguez; 360 over Vallecas (M) Blas Molina; 130 over Garciaz (CC) Ana Teno; 77 over Illescas (TO) Leandro Andrade; 60 over Ugena (TO) Sonia Núñez; 2,000 over Arroyomolinos de Montánchez (CC) Antonio Nieto.



Image nº 87: Flock of cranes leaving on migration. Photo: José A. Román.

-22/02/23: 572 over Cabanillas del Campo (GU) José Luis (DALMA); 350 over Guadalajara; 500 over Iriepal (GU) F.J. Calvo; 452 over Guadalajara, Fernando García; 500 over Alcalá de Henares, Juan J. Calvo (DALMA); 440 over Guadalajara, David Velliska; 80 over Alcalá de Henares (M) Vicente López; 2,500 over Santa Amalia (BA) Gustavo Gahete; 1,983 over Trujillo (CC) Seppo Hjerpe; 160 over Villarroya de la Sierra (Z) and 175 over Torrijo de la Calzada (Z) Marco A. Escudero; 250 roost at Yesa reservoir (HU/NA) Javier Artieda; 4,539 over Largartera (TO) César Clemente, Jesús Ortiz; 300 over Aranjuez (M); 750 over Ugena (TO) Johnathan Dadds, Javier Paricio; 700 over the River Manzanares (M) Rafa Al, J.G.;

640 over La Casa de Campo (M) Toni Alonso, Ander Álvarez, Raúl Marín, Enrique Villaespesa; 180 over Madrid, David Valentín; 6 over El Escorial (M) José M. Altares; 200 over Colmenar Viejo (M) Alf Ortega; 600 over Azuqueca de Henares (GU) Agustín Mariscal; 400 over Daganzo de Arriba (M) Beatriz Cortés; 100 over Las Lagunillas, Gárgoles de Arriba (GU) Patricia Sancho; 12 over Cuenca, Álvaro Patiño; 500 over Huertas de la Obispalía (CU) Pau Soler; 3,000 over Daroca (Z) Adrián Sánchez; 4 over Palacios de Alcor (P) César Díez; 1,235 set off from Medellín (BA) and 315 over the River Búrdalo (BA) José A. Román; 354 over Los Blázquez (CO) Marga Martín; 250 over Cáceres, Fernando Sánchez; 240 over La Granjuela (CO) Miguel Carrasco; 450 over Garrovillas de Alconetar (CC) Francisco Lopo; 300 over Villa de Don Fadrique (TO) María C. Comendador; 263 over Cervera del Río Alhama (LR) Lidia Roncero; 300 over Artieda (Z) and 704 over the Roncal Valley (HU) Javier Artieda; 3,319 over Las Rozas (M) Juan P. Fresno; several hundred set off from Gallocanta lagoon (TE/Z) Carmina Franco; 500 over Alcalá de Henares (M) Vicente López; 650 over Villanueva del Pardillo (M) Patricia Alonso; 178 over La Aldea del Obispo (CC) Neil Renwick; 500 over Leganés (M) Alfredo Mirat; 370 over Guadalajara, DALMA; 215 over Aguas Vivas (CU) Jesús; 750+ go over Riglos (HU) Pablo Vallés; 50 over Béjar (SA) Mª José Benítez; 500 over Ruecas (BA) Mª del Mar Román, Jesús Hernández; 300 over Navalmaral de la Mata (CC) Javier Briz; 80 over Jirueque (GU) Vicente Peinado (DALMA); 1,050 over Cabanillas del Campo (GU) Fernando García; 1,050 over Recas (TO) David Martín (ARDEIDAS); 1,000 over Barajas (M) José A. Buendía (ARDEIDAS); 600 over Candeleda (AV) Antonio Alía (ARDEIDAS); 90 over La Val d'en Bas (GI) David Batlle; 1,989 over Villanueva del Pardillo (M) Mariajo Caballero; 4 over Ivars d'Urgell (LL) Joan Rodríguez; 121 over Almenar (LL) Joan Estrada; 102 over Loza reservoir (NA) Julen Santa Cristina; 200 over Caspueñas (GU) Carmelo (DALMA); 1,070 over Cabanillas del Campo (GU) Fernando Gómez; 550 over Zaragoza; 450+ over Colmenar Viejo (M); 100 over Villaviciosa de Odón (M) Mark Davis; 300 over Las Rozas (M) Carmen Serralle; 135 over Valdebebas (M) Beatriz Martín; 300 over Meco (M) Lorenzo Rodríguez; 124 over Abay (HU) Daniel Barceló; 100 over Las Lagunillas (GU) Patricia Suárez; 34 over Sierra de Fuentes (CC) José Mª Benítez.



Image nº 88: Group of cranes resting in the province of Burgos: Photo: José M. Ayuela



Image nº 89: Cranes migrating over Santa Amalia (BA). Photo: Gustavo Gahete.

-23/02/23: 91,000 are censused during the morning at Gallocanta lagoon (TE/Z) and 52,000 leave; during the afternoon 76,122 are censused S.A.R.G.A.; 25 over Brozas (CC) Elvira Cano; 150 over Los Blázquez (CO) Marga Martín; 1,700 over Pozuelo de Alarcón (M) José A. Fimia; 70 over Hinojosa del Duque (CO) J. Felipe Flores; 190 over Almodóvar del Río (CO) Manuel Moral; 500 circling at La Muela (Z) María Berna; 402 over Cabanillas del Campo (GU) Crix (DALMA); 100 over Fuentes de Ebro (Z) Javier Domínguez; 150 over El Pardo (M) Marcos Escuredo (GOEP); 220 over Guadalajara, Sergio López; 200 over Yunquera de Henares (GU) Ana Herrero; 150 over Guadalajara, Fernando Gómez (DALMA); 32 over Mata de Alcántara (CC) Fernando Sánchez; 160 over Torrejoncillo del Rey (CU) Rocío; 240 over Movera (Z) José L. Rivas; 1,000 over Velada (TO) Luna Redondo; 390 over Titulcia (M) Antonio Mansilla; 1,000 over Villaviciosa de Odón (M); 200 over the River Manzanares (M) Rafa Al; 90 over Madrid, José L. Manzanero; 300 over Alcobendas (M) Pablo Pozo; 100 over Villafranca de Ebro (Z) Alfredo García; 16 over Roses (GI) Oriol Clarabuch; 200 over Los Santos de la Humosa (M) Javi Rejos (DALMA); 400 over Marchamalo (GU) Carlos Paulos (DALMA); 500+ over Yunquera de Henares (GU) Fernando Gómez; 175 over El Retiro (M) Juan C. Rubio; 60 over Puerto Peña (BA) José L. Bautista, Martín Kelsey, 2 over Mediana de Voltoya (AV) Paco García; 12 over Abertura (CC) Carl Dawning; 750 over Ricla (Z) Javier Traín; 1,000 over Daroca (Z) Adrián Sánchez.



Image nº 90: Flock circling over the River Guadiana (BA). Photo: José A. Román.

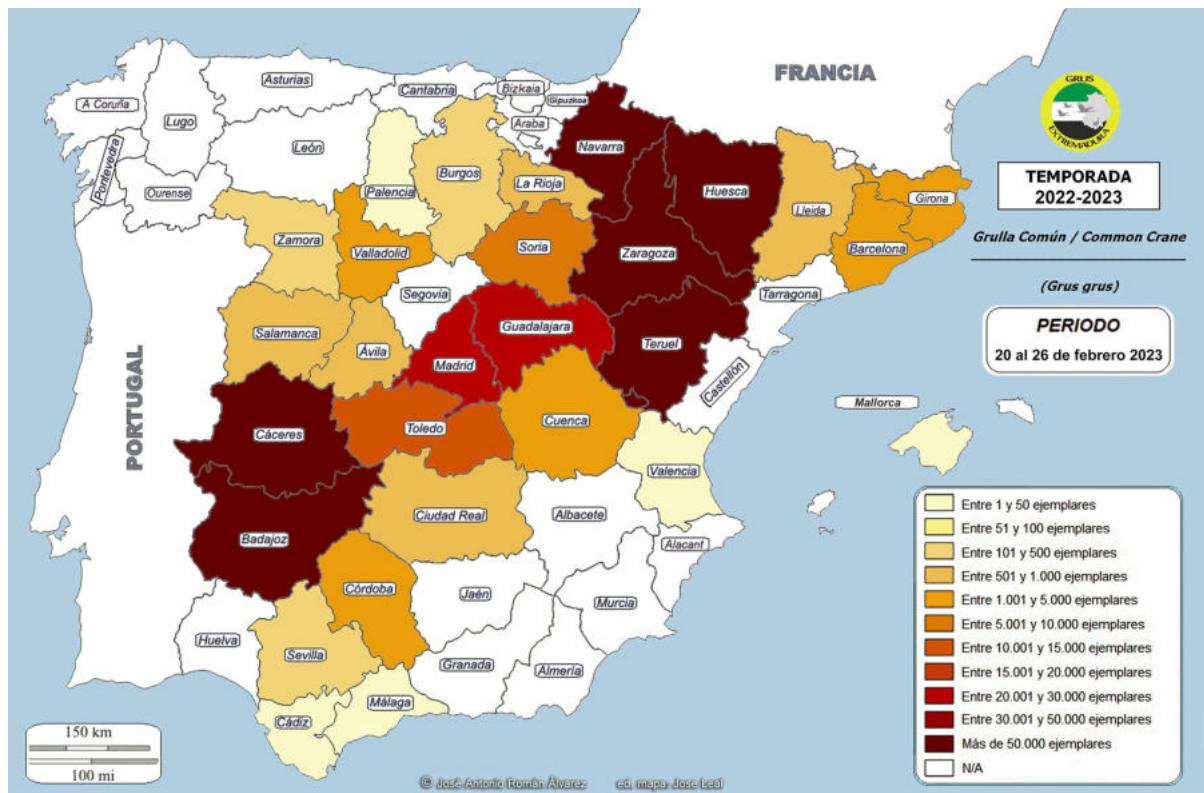
-24/02/23: At least 50,000 set off from Sotonera reservoir (HU) Pablo Vallés; 4,000+ at Buendía reservoir (GU) Carlos Arroyo (DALMA); Ricardo Rodríguez; 314 over Monfragüe National Park (CC) José Leal; 170 over Hinojosa del Duque (CO) J. Felipe Flores; 500+ over San Miguel de Vanero (SA) Jorge Giner-Abatí; several hundred over Javiejaray (HU) Lily Robles; 93+190 over La Almolda (Z) Conchi Esteban; 180 over La Encomienda stream (VA) Fermín Aguado; 80 over La Aldea del Obispo (CC) Neil Renwick; several thousand over Luesia (Z) Eva Rubio; 100 over Fraga (HU) Alejandro Enredh; at 15:20h new flocks arrive at Gallocanta lagoon (TE/Z) Carmina Franco; 1,666 over Ejea de los Caballeros (Z) Javier López; 115 over Bujaraloz (Z) Conchi Esteban; 325 over El Carrascalejo (BA) Agapito J. Verde; 400+ over Cornalvo natural park (BA) Jesús Valiente; several hundred over Torrejón el Rubio (CC) José Mª Rojo; 800+ enter the Roncal Valley (HU) Javier Artieda; 600 over Soria, Juan L. Hernández; 362 over Cabanillas del Campo (GU) Fernando Gómez; heard at Puebla de Beleña (GU) Juan J. Calvo (DALMA); 800+ roost at Yesa reservoir (Z) Javier Artieda; 80 over Jirueque (GU) Vicente Peinado (DALMA); 360 over Cabanillas del Campo (GU) Jose Mari (DALMA); 70 over Navàs (B) Joan Gimestells; 17 over Manlleu (B) Albert P. Font; 70 over Torrecillas de la Tiesa (CC) Fabio Mancolín; 190 over Peña Falcón, Monfragüe National Park (CC) Sergio Mayordomo, César Quijada; 308 over Monfragüe National Park (CC) Xabier Vázquez, Juan F. Fernández; 400 over Arrocampo reservoir (CC) Fátima Garrido, Toni Pons; 600 over Escalona (TO) John Muddeman; 2,684 arrive at Sotonera reservoir (HU), where there are 10,000 birds, José M. Canudo, Jorge Lardiés; 4,956 go over La Loteta reservoir (Z) and 2,727 that were migrating come down to roost, María Berna; 39 roost at El Hoyo lagoon (AV) Arón Blázquez; 100 over Torellò (B) Susanna Crosas; 110 over Sant Vincent de Torellò (B) Lluis Copete; 300 over Aranjuez (M) Diego Martínez, Silvia Wandosell; 50 over Torrejón de Velasco (M) Jesús Ruiseñor; 1 at El Raso lagoon (VA) Toni Alonso; 35 over Valladolid, José L. Gallego; 20,000 over Longues (Z) Ricardo Pérez; 54

over Bartuenga (HU) Juan C. Albero; 30 over Huesca, Lourdes Hernández; 542 over Cabanillas del Campo (GU) José M^a Gómez, Fernando Gómez (DALMA); 80 over Jirueque (GU) E. Peina (DALMA); 200 over Les Planes de Hostoles (GI) Ignasi Llover; 450 over Sangüesa (NA) Jon Sola; 1,356 over Pamplona (NA) Teresa Subiza, Rajen Ayerra; 1,394 over Loza reservoir (NA) Julen Santa Cristina; 180 over Abay (HU) David Barceló; 200 over Patones (M) Clara Álvarez; 2,000+ go over Ugena (TO) Juan Torres; 2,100 over Campueñas (GU) Carmelo (DALMA); 20 over the River Guadalupejo (CC) Jacqueline Cartigny: 18 at Ivars lagoon (LL) Quim Minoves; 700 over Pamplona (NA) Patxi Andueza; 140 over Monfragüe (CC) Raúl Granados; 3,000 over Daroca (Z) Adrián Sánchez; 50 over Torrejón de Velasco (M) Jesús Risueño; 500 over Calatañazor (SO) Virginia Marco; 300 over Navalcarnero (M) Jorge García; 33,000 have gone over Navarra, Jesús Mari Lekuona *et al.*

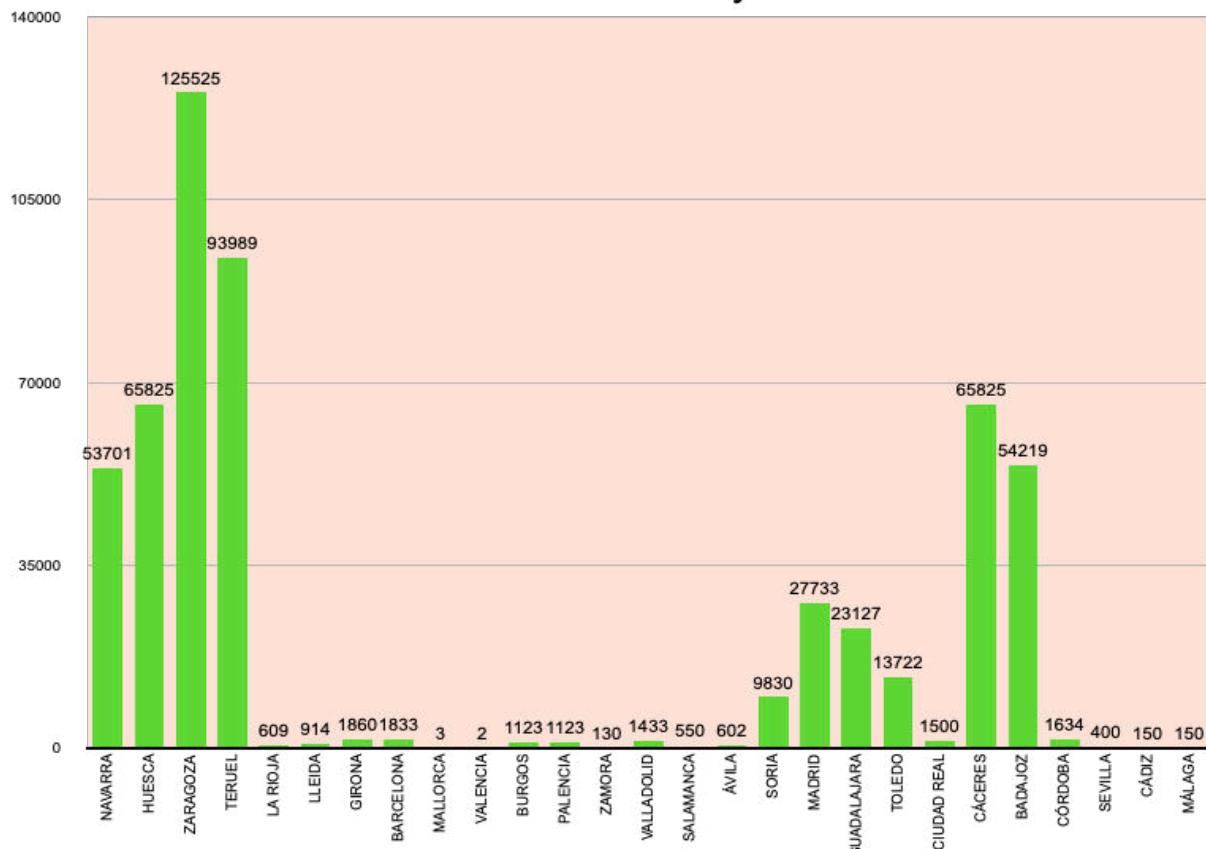
-25/02/23: 37,000 at dawn at Gallocanta lagoon (TE/Z) Antonio Torrijo; 4,500 at El Cubillo lagoon (SO) Juan L. Hernández; 400 over El Higuerón (CO) José Cañas; 100 over Colmenar Viejo (M) Sol Senise; 4,600 have roosted at Yesa reservoir (Z) Javier Artieda; 1,800 over Villafranca de los Caballeros (TO) Germán Loarces; 3,500 at Buendía reservoir (GU) José L. Ramos (DALMA); 314 over Zaragoza, Francisco J. Sampietro; 6 at El Taray lagoon (TO) Ángel Velasco; 1,000 over Zuera (Z) María Berna; 99+77 over Bujaraloz (Z) Conchi Esteban; 600 over Molina de Aragón (GU) Fernando Alonso; 450 have roosted at Guarra lagoon (SO) and 2,500 over Tardajos de Duero and Alconaba (SO) Juan L. Hernández; 1,500 over Ontinar del Salz (HU) Jorge Lardiés; 3,000 over Fombuena (Z) Dianka (DALMA); 80 over Leganés (M) Alfredo Mirat; 230 over Zaragoza, 80 over Alagón (Z) and 30 over La Loteta (Z) Federico Sancho; 700 arrive at Buendía reservoir (GU) Carlos Arroyo (DALMA); 720 over El Carrascalejo (BA) Agapito J. Verde; 155 over Zaragoza, José A. Domínguez; 45 over Beteta Gorge (CU) Fernando Alonso; several thousand arrive at Sotonera reservoir (HU) Irene Marina; 7,691 leave on migration from Sotonera reservoir, but only around 1,200 manage to cross the Pyrenees and the rest return, Francisco Quesada, Silvía Duque, María Berna *et al.*; 438 over Cabanillas del Campo (GU) Fernando Gómez; 110 over Mata de Alcántara (CC) Fernando Sánchez; 449 over Cabanillas del Campo (GU) DALMA; 850 over Lizoain (NA) Juan I. Deán; 320 over Castelló d'Empuries (GI) Ponç Feliu; 73 over Palau-Saverdera (GI) Samid S.C.; 50 over Castellnau de Bages (B) Bernat Ferrer; 20 over Girona, David Fumosas; 130 over Vic (B) Pau Baucells, Lluís Prat; heard at Santa María de Besora (B) Jordi Faus; 780 over Torelló (B) Jordi Erra; 249+116 over Linyola (LL) Xavi Escobar; 218 over Alguaire (LL) Xavi Escobar, Enric Ortega; 2 in Sueca marsh (V) Joan Balfagón, Andrés Balfagón, Marcos Resl, Gullém de los Sotos; 116 over Catellnou de Sesna (LL) Marc Gálvez; 54 over Timoneda d'Alfès (LL) Patrick Finch; 18 over Plans dela Unilla (LL) Pablo Pascual; 63 over Loreto reservoir (HU) Jorge Lardiés 280 over Alto de Isona (NA) Gorka Gorospe; 80 over Lóguida (NA) Miguel Minondo; 255 over Las Bardenas Reales (NA) Sara Gómez; 300 over San Jorge (HU) Jorge Lardés; 80 over La Puntaza de Remolinos (Z) Esther Charles; 700 over Utebo (Z) Alfredo Sánchez; 1,850 over El Galacho de Justibol (Z) Javier J. Vallina, Jorge Peláez; 40 over Zaragoza, Jorge Anaud; 429 over Movera (Z) José M. Sancho; 155+170 over Zaragoza, José A. Domínguez, Thomas Rickfelder; 10,000 over Daroca (Z) Adrián Sánchez; 30 over Alique (Z); 1 at Santillana reservoir (M) Jesús Ríos; 200 over Albarreal de Tajo (TO) Christophe Pontegnie; 7 over Arrocampo reservoir (CC) Sam Thomas, Jacques Turner-Moss; 2,450 over Magasca plains (CC) Seppo Hjerpe; 2 over Peña Falcón, Monfragüe National Park (CC) Sergio Mayordomo, César Clemente, Antonio Méndez, Martín López, Ángel L. Méndez; 29 over Trujillo (CC) Carmen Pérez-Aloe; 5,300 over Loza reservoir (NA) Javi Sola, Jon Sola; 40 over Egües (NA) Ángel Larubbe; 16,000+ have gone over Navarra, Jesús Mari Lekuona *et al.*

-26/02/23: 400 in rice fields at Capdesaso (HU) Eduardo Gracia; 16 at La Nava lagoon (P) Fernando Jubete Guzón; 30 over Sant Martí d'Albars (B) Jordi Clavell; 946 over Castelló

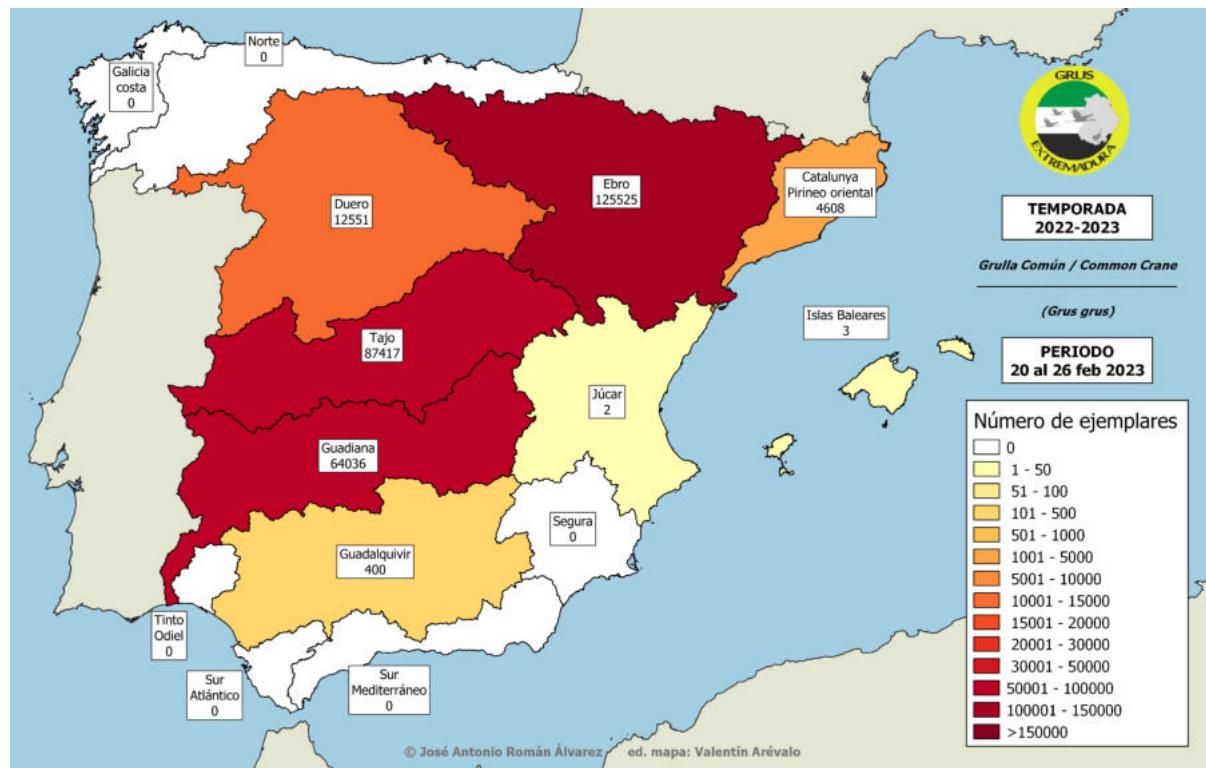
d'Empúries (GI) Ramón Aguilar; 25 over Roses (GI) Ramón Homs; 170 over Pals (GI) Joachim Camps; 16 over Santa Cristina d'Aro (GI) Rosa Martínez; 11 over Folgueroles (B) Pep Nogué; 335 over Sant Agustí de Lluçanès (B) Feli Guardado; 150 over Sant Pere de Torelló (B) Susanna Crosas; 90 over Huesca, Juan C. Albero, Jorge Lardiés; 2,000 at Yesa reservoir (Z) Sara Gomes; 500 at Buendía reservoir (CU) Ricardo Rodríguez.



Week from February 20 to 26

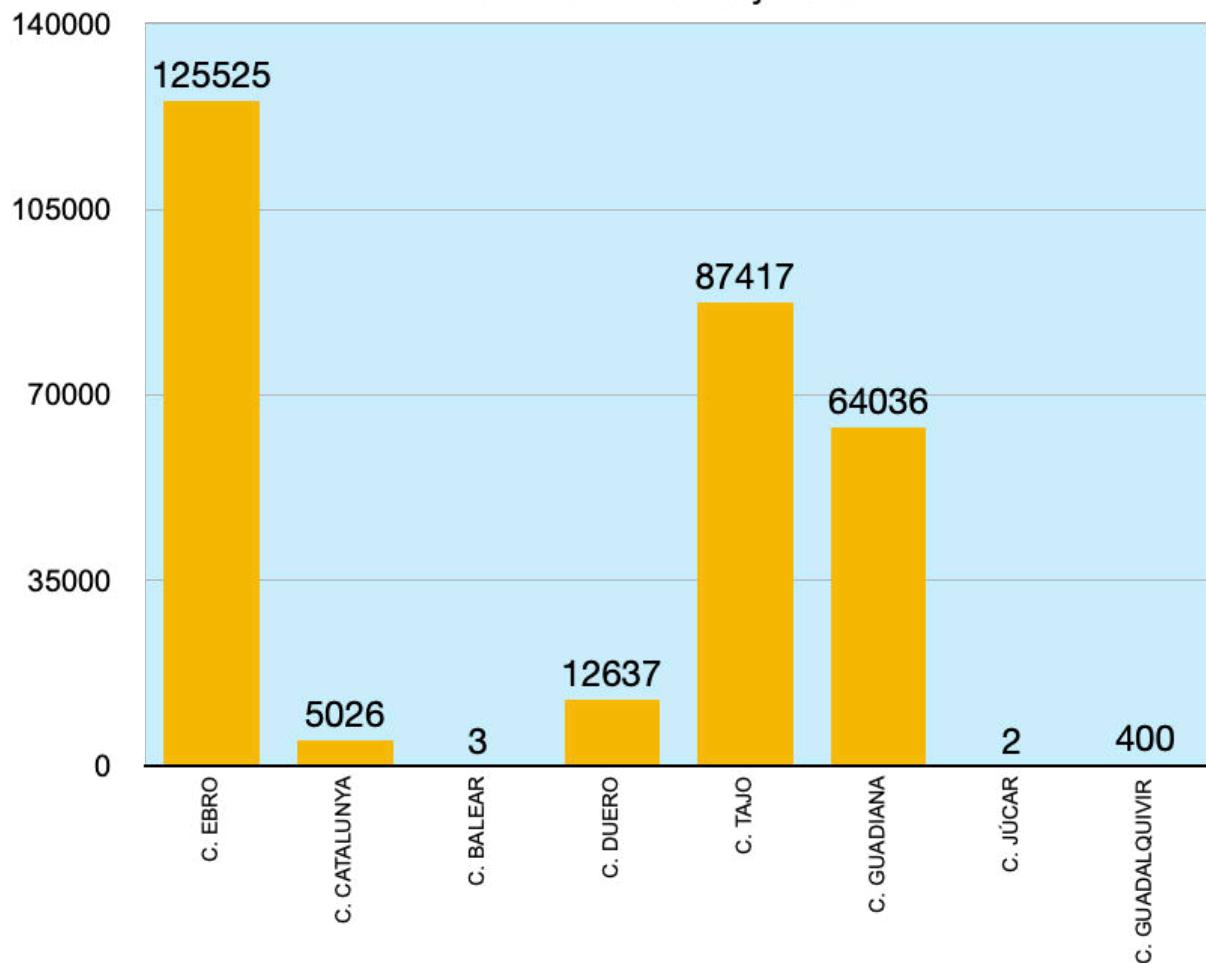


Graphic nº 43: Migration by provinces between February 20 to 26



Map nº 34: Migration by catchment areas, February 20 to 26

Week from February 20 to 26



Graphic nº 44: Migration by catchment areas, February 20 to 26

Cranes continue migrating to Gallocanta lagoon, where they are stopped by snow, staying until the Saturday, when weather conditions improve. At Sotonera, on the other hand, they continued migrating, favored by the absence of snow, although many moved to Catalonia.

-27/02/23: 500 at Arroconejos reservoir (BA) Miguel Corvillo; 1,200 in rice fields at Capdesaso (HU) Eduardo Gracia; 5,520 set off from Sotonera reservoir (HU) Francisco Quesada, Esther Yera; 150 over Coria (CC) Miguel Todón; 400 go over Javiejaray (HU) and 700+ over Berdún (HU) Lily Robles; 13 over Sancti Spiritus (SA) Alberto Pantoja; 200 at Buendía reservoir (GU) Cristina Ruiz; 48 over La Nava lagoon (P) Rafael Hermosilla; 150 over Palau-Saverdera (GI) Joan Ventura; 51 over La Jonquera (GI) Joan Budó; 110 over Cassa de la Selva (GI) Pau Barnés; 67 over Vilablareix (GI) Miguel A. Fuentes; 120+260+9+70 over Manlleu (B) Susagna Casas, Carles Martorell, Ramón Prat, Galdric Plana; 60+80+117 over Santa María del Corcó (B) Galdric Plana, Xesco Puigdomenech; 85+28+100 over Torellò (B) Jordi Erras, Roger Arquimba; 30 over Polinyà (B) Cristian Bonsoms; 12 over La Garriga (B) Toni Aparicio; 11 over Lliçà d'Amunt (B) and 27 over Lliçà del Val (B) Cristian Bonsoms; 15 over El Papiol (B) Pablo Pascual; 9 over Sant Julià de Ramis (GI), 52 over Cornellà del Terri (B) and 90 over Serinyà (GI) Castillo Izquierdo; 10 over Talarn (GI) Jordi Castillo; 74+35 over the Llobregat delta (B) Ferrán López; 1 at Prat de

Llobregat (B) Joel Soto; 17 over Sant Joan Despí (B) Sergio Hoces; 130 over Alguerri-Balaguer (LL) Quim Minoves.

-28/02/23: 500 at Artasona (HU) Esther Yera; 100 over Sevilla, José Zarapico; several thousand arrive at Gallocanta lagoon (Z/TE), where there are no departures, Antonio Torrijo; 11 at Sotos de Alfaro (LR) Borja Sanz; 996 go over the Sierra de Guara (HU) Francisco Quesada; 200 over Calamonte (BA) Samuel del Hoyo (ADENEX); 127 leave Fuente de Piedra lagoon (MA) José M Ramírez, Manolo Díaz; 216 over Villar del Infantado (CU) Ángel Arellano; 40 over Alcázar de San Juan (CR) Jesús Porrero; 450 at Aznalcázar (SE) Rafael Carmona; 120 over Castelló d'Empúries (GI) Joan Ventura; 9 over La Garriga (B) Arturo Morales; 10 over Ses Salines natural park, Ibiza (IB) Iván Garza; 6 at S'Albufera natural park, Mallorca (IB) Maties Rebassa; 12 over the Llobregat delta (B) Ferrán López; 68 over La Sierrezuela, Posadas (CO) Manuel Moral; 2 at Andratx, Mallorca (IB) Ana Mª Jiménez; 75 over Rabanales (CO) J. Felipe Flores; 80 over Ciudad Real, Anibal de la Beldad.



Image nº 91: Cranes before leaving Montmesa (HU). Photo: Pablo Vallés.

01/03/23: 25,000 set off from Sotonera reservoir (HU) Pablo Vallés, Irene Marina; 7,000 set off from Gallocanta lagoon (TE/Z) at -3º C, José M. Pueyo, Antonio Torrijo; several thousand cross the valleys of Ansó (HU) and Navarra, Lily Robles; several hundred over Utebo (Z) Ignacio Romero; 150 over Andújar (J) Pedro A. García; 5,000 arrive at Sotonera reservoir at 14:49h, having left Gallocanta, Esther Yera, Francisco Quesada; 2 in rice fields at Sueca (V) Toni Alcocer; 175 over Villar del Infantado (CU) Ángel Arellano; 22 over Alcubierre (HU) Ricardo Pérez; 6 over Atapuerca lagoon (BU) Marc Barrios; 24 at La Colada reservoir (CO) Carmen M. Ayuso; 44 have roosted in rice fields at Capdesaso (HU) Eduardo Gracia; 35 over La Albuera lagoon (BA) José L. Bautista; 74 roost at Santa Teresa reservoir (SA) Vicente G. Garrudo; 9 over Pamplona (NA) Sandra Pineda; 2,000 at La Algaida (CA) heading for roosts, Manuel Bárcena; 150 at Aznalcázar (SE) Thijmen Stolk; 674 over Castelló d'Empuries (GI) Joan Ventura, Oriol Clarabuch, Àlex Fonollosa; 50 over Cortés reservoir (HU) Arturo Sanz; 100 over Sant Pere Pescador (GI) Alejandro García; 63 over Riner (GI) Robert Manzano; 200 over Cadaqués (GI) Samuel González; 420 over Pamplona (NA) Rajen Ayerra; 400 over Ciudad Real, Anibal de la Beldad; 10 at Sant Josep de sa Atalaia, Ibiza (IB) Thijmen Stolk; 9 at S'Albufera natural park, Mallorca (IB) Pere Vicens; 3 at Marratxí, Mallorca (IB) Xavier Manzano; 214 over Trujillo (CC) Carmen Pérez-Aloe; 4 over El Robledo (CR) Manu Santa-Cristina; 99 at Junta de los Ríos, Alcázar de San Juan (CR)

Pedro Bustamante; 400 over Cubas de la Sagra (M) Chemi Ibáñez; 13 over Sotos de Alfaro (LR) Jesús Ucha; 1,580 over Sangüesa (NA) Jon Sola; 38 over La Mueda reservoir (NA) Teresa Subiza.



Image nº 92: Cranes leaving Sotonera reservoir (HU). Photo: Irene Marina.

-02/03/23: 200 leave Gallocanta lagoon (TE/Z) Francisco J. Sampietro; 20 over Olsón (HU) Jan Verhoeve; 90 over Badajoz, Julián Cendrero; 200+ over Alcázar de San Juan (CR) Vicky García; 8 at Manjavacas lagoon (CU) Ángel Arellano; 41 roost at El Hoyo lagoon, El Oso (AV) Cruz González, Jesé M. García; 700 at Yesa reservoir (Z) Javier López; 32,991 are censused at Gallocanta lagoon (TE/Z) where 2,000 migrants arrive (S.A.R.G.A.) 7 at La Janda lagoon (CA) Antonio Román, Juan Ramírez; 498 at Arroyoconejos reservoir (BA) Ramón Ruiz; 50 over Montijo (BA) José L. Bautista; 50 over Los Barruecos, Malpartida de Cáceres (CC) Alan Weston; 160 at Magasca (CC) Martín Kelsey; 162 over Trujillo (CC) Carmen Pérez-Aloe; 42 over Monfragüe National Park (CC) José M. Jiménez; 120 over Toril (CC) Álvaro García; 1 at Pepino (TO) Gustavo Fernández; 7 over El Carpio de Tajo (TO) Peter Alexander; 12 at Las Yeguas lagoon, Alcázar de San Juan (CR) Pedro Bustamante; 12 over Leganés (M) Rubén Blázquez; 100 over Daganzo de Arriba (M) Christophe Pontagnie; 24 over Ugena (TO) Rubén Blázquez; 300 over Azuqueca de Henares (GU) Agustín Mariscal; 80 over La Mueda reservoir (NA) Jon Sola; 101 over Alcazarén (VA) and 97 over Medina del Campo (VA) Alejandro Sanz; 140 at Fuente de Piedra lagoon (MA), where 150 migrants arrive, of which 115 stay and 25 continue their journey, Antonio Tamayo, Javier Fregenal; 10 at Son Flor, Calviá, Mallorca (IB) 10 at La Loteta reservoir (Z) Javier Domínguez; 350 over San Román de Los Montes (TO) Francisco Rodríguez (ARDEIDAS); 200 over Jaulín (Z) Aitor Mora; 22 over Cabanillas del Campo (GU) José M. García.



Image nº 93: Cranes at Gallocanta lagoon (TE). Photo: Carmina Franco.

-03/03/23: 60 over Azuqueca de Henares (GU) F. Javier Calvo; 15 circling over Badajoz, Mariano Cabrero; 85 over Villar del Infantado (CU) Ángel Arellano; 89 at Cubillo lagoon (SO) Daniel Mogica; 600 have roosted at Sotonera reservoir (HU) Esther Yera; 55 over El Carrascalejo (BA) Agapito J. Verde; 160 at Aznalcázar (SE) Bert Kasins; 180 over Adoán (NA) Gorka Gorospe; 200 over Roses (GI) Enric Streich; 80 over La Mueda reservoir (NA) Javi Sola; 2 over Sotos de Alfar (LR) Borja Sanz; 70 over Atapuerca lagoon (BU) Marc Barrios, Pedro Arratibel, M. Cruz García, César Díez; 60 over Loreto reservoir (HU) Antonio Sanz; 50 over La Zolina reservoir (NA) Bishop Che; 15 over Curiel de Duero (VA) Toni Anthony, Phil Thorpe; 75 over Camarma de Esteruelas (M) Óscar Oeo; 17 over Velilla de San Antonio (M) Antonio Espín; 140 over Don Álvaro (BA) Fergus Crystal; several hundred over Chica lagoon, Villafranca (TO) Germán Loarces; 11 at Valdesequera (BA) José L. Vinagre; 29 over Castelló d'Empuries (GI) Alejandro García; 95 over Trujillo (CC) Seppo Hjerpe; 400 over Villagonzalo weir (SA) and 22 over Alba de Tormes (SA) Natalia Iris, Javier Jiménez; 4,000+ at El Hito lagoon (CU) David Guillén, Jannick Forquignon; 28 over Tahivilla (CA) Juan Rodríguez.

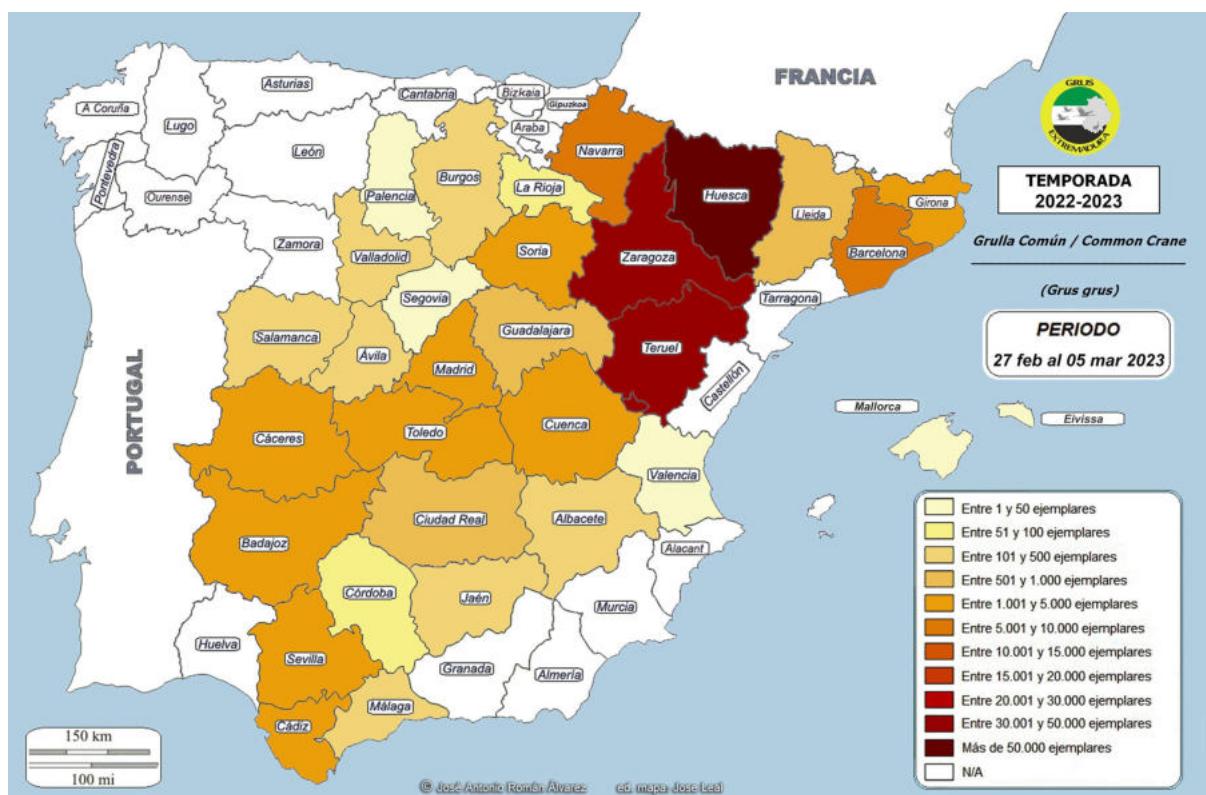
-04/03/23: 30,000 set off from Gallocanta lagoon (TE/Z), where 7,000 cranes remain, Antonio Torijo, José M. Pueyo; 418 at Peña Hueca lagoon, Villacañas (TO) Ángel Velasco; 147 set off from Cuerda del Pozo reservoir (SO) Isabel Ortega, Juan L. Hernández; 100 over Pedrezuela reservoir, Guadalix de la Sierra (M) Juan Salas; 850 over Vimuela (SO) José L. Hernández; 60 over Quero (TO) Ángel Velasco; 1,200 over Lumpiaque (Z) Andrea Molina; 602 leave Yesa reservoir(Z) Javier López; 206 over Arenas de San Pedro (AV) Cruz González, José Mª García; 223 in rice fields at Capdesaso (HU) Esther Yera, Jorge Lardiés; 10 over Velilla de San Antonio (M) Christophe Pontegnie; 40 over Ayerbe (HU) Irene Marina; 150 over Javierjarray (HU) Francisco Quesada; 279+250+286 over Movera (Z) José L.

Rivas, Joseán Domínguez, José M. Sánchez; 100 over San Martín de la Vega (M) Sebastián Vélez; new migrants arrive at 15:15h at Gallocanta lagoon (TE/Z) Carmina Franco; 3 over Girona, Albert Cufí; 2 over Les Masies de Voltregà (B) Josep Redorta; 200 over Ivars d'Urgell (LL) Elena Farsè; 3 over Montijo (BA) Arturo Pérez; 3 at La Aldea del Obispo (CC) Neil Renwick; 510 over Algodor (M) Mireya Navarro, JuanMa Santana; 100 over Zaragoza, Felipe Zapico; 60 over Cosa (TE) Rosa Requena; 250 over Navàs (AB) Joan Ginestells; 200 over Sant Bartomeu del Grau (B) Irene Figueroa; 4,500 over Manlleu (B) Carles Martorell; 360 over Torellò (B) Susagna Crosas; 300 over Sant Martí d'Albars (B) Jordi Clavel; 3 over La Cuenca Alta del Guadarrama natural park (M) Ignacio Domingo; 160 over Alpedrete (M) Miguel Aguilar; flock over Haz del Jarama (GU) Marc Arcas; 300 over Balaguer (LL) and 50 over Calaf (B) Carles Oliver; 200 over Remera (GU) David Almonacid; 140 over Alcollarín (CC) Seppo Hjerppe; 900 over Sant Martí d'Albars (B) Jordi Clavell; 80 over Pétrola (AB) Mark Simmonds; 16 over Ciempozuelos (M) Rafa Al; 50 over the River Duratón gorges (SG) Fernando Aranguren; heard at Hervías lagoon (LR) José I. Sáenz; 400 over Zaragoza, Pedro Navarro; 1,000 over Abay (HU) Daniel Barceló; 85 roost at Atapuerca lagoon (BU) Federico Sancho; 13,808 are censused at Sotonera reservoir (HU), although more arrive, totalling up to 15,000 birds, Jorge Lardiés, Silvia Duque, Juan L. Muñoz, Esther Yera, Paula Liesa, Daniel Forte.

-05/03/23: 500 over Peñaflor de Gállego (Z) María Berna; several flocks migrating over Figueruelas (Z); heard at Zaragoza, Josean Domínguez; 12,000 set off from Gallocanta lagoon (TE/Z) at 11:00h, Carmina Franco; flock over Montmesa (HU) Irene Marina; at 15:12h new flocks arrive at Gallocanta (TE/Z) Carmina Franco; 15,000 set off from Sotonera reservoir (HU) José M. Canudo, Esther Yera, Jorge Lardié; 300 over Castelló d'Empúries (GI) Antoni Abad, Ramón Homs; 250 over Navàs (B) Joan Giméstells; 60 over Sant Martí d'Albars (B) Jordi Clavell; 57 at Usagre (BA) and 11 at Alange reservoir (BA) Ramón Ruiz; 5 at Tablillas de Záncara (CR) Mª José Valencia; 60 over Madrid, Thomas Rickfelder; 6 over Soto de Aragón (Z) Javier Vera; 15,000 migrating over Abay (HU) Daniel Barceló; 140 at Loreto reservoir (HU) Esther Yera, Jorge Lardiés; 5 at Sariñena lagoon (HU) Eduardo Gracia; 2 at Alcañiz (TE) Felipe Rosado; 248 at La Loteta reservoir (Z) Alfredo Sánchez; 60 over Zaragoza, Enrique Pelayo; 1,228 go over Navarra, Jesús Mari Lekuona *et al*; 50 over Sotos de Alfaro (LR) Miguel Martínez; 25 over El Carrascalejo (BA) Agapito J. Verde; 220 over El Port de la Selva (GI) Ru Alonso; 86 over Balsareny (B) Adrián Pina; group at 19:45h over Ger (GI) Sandra Gil; 200 over Sant Bartomeu del Grau (B) Irene Figueroa; 5 over Perafita (B) Ramón Baucells; 280 over Oristà (B) Pep Illa; 650 over Torellò (B) Susagna Crosas; 150 over Sant Vincenç de Torellò (B) Lluís Copete; 210 over Camprodón (GI) Ferrán González-Prat; 150 over Tárrega (LL) Roger Arquimbau; 58 at Castrejón reservoir (TO) Javier Nicolau; 2 over Villar de los Comuneros (VA) Jaime Durantez, Adrián F. Fernández.

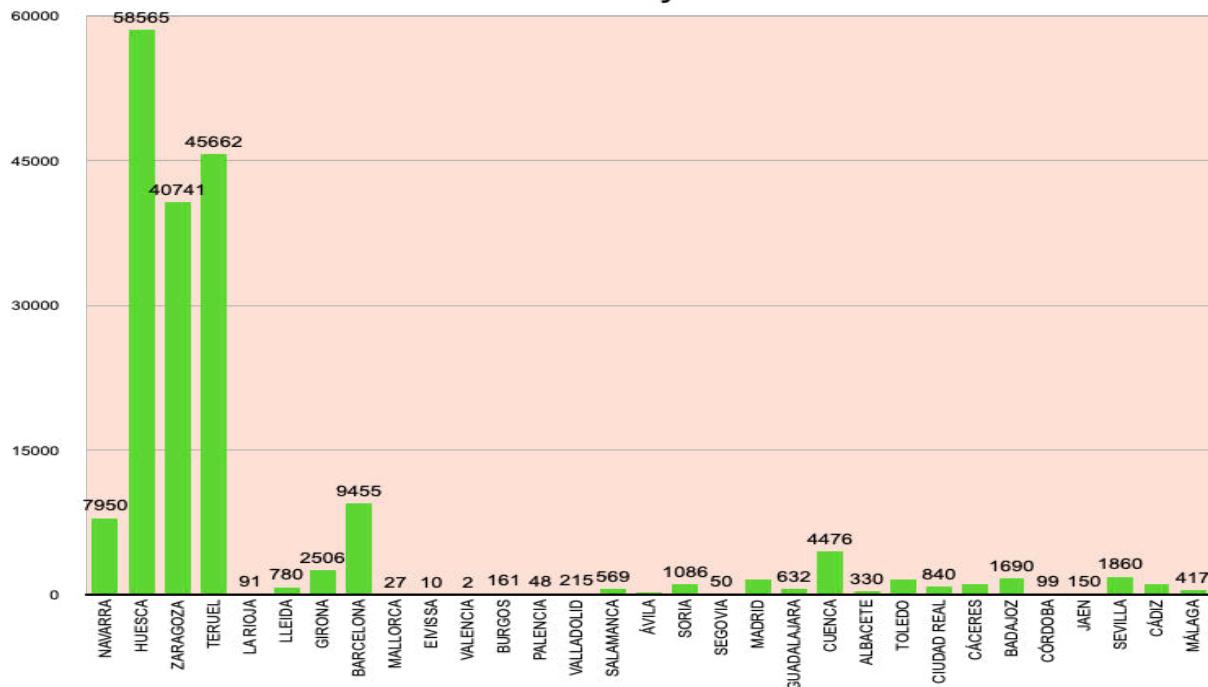


Image nº 94: Cranes feeding in fields at Bello (TE). Photo: Carmina Franco.

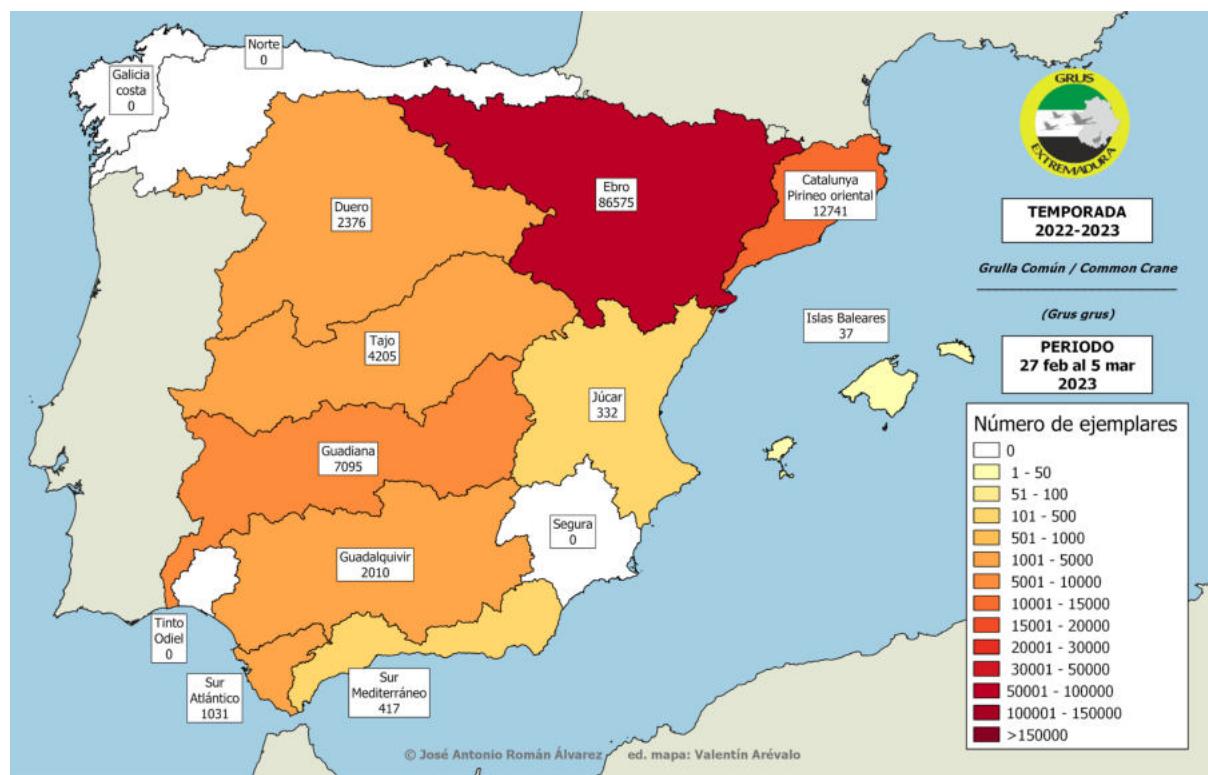


Map nº 35: Migration by provinces between February 27 to March 5

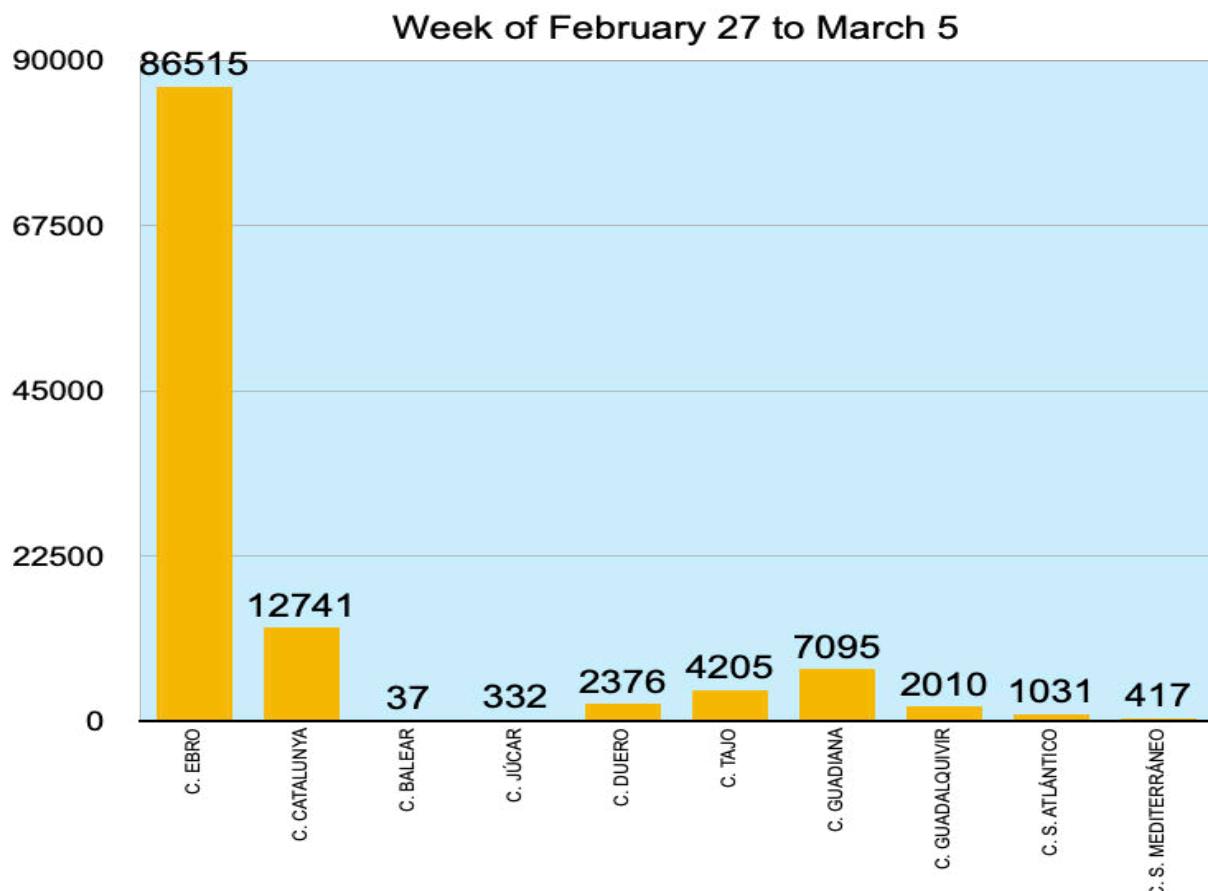
Week of February 27 to March 5



Graphic nº 45: Migration by provinces, February 27 to March 5



Map nº 36: Migration by catchment areas February 27 to March 5



Graphic nº 46: Migration by catchment areas February 27 to March 5

A quiet week, as the bulk of the migrants have already crossed the Pyrenees and only small groups remain, in many cases mostly made up of young or immature birds.

-06/03/23: 205 over Almodóvar del Río (CO) Javier Morales; 10,000 set off from Sotonera reservoir (HU) Esther Yera, the majority going over over Jaca (HU) Cristina Ruiz; no migration at Gallocanta lagoon (TE/Z) Carmina Franco; 12 at Grande lagoon, Villafranca de los Caballeros (TO) M. Carmen Comendador; 900 roost at Sotonera reservoir (HU) Esther Yera; 3 at Peraleda de la Mata (CC) Vicente Risco; 380 over Abay (HU) David Barceló; 68 at Cañizar lagoon (TE) Rafael Muñoz; 100 over Abizanda (HU) Jan Verhoeve; 200 over Pitillas lagoon (NA) Javier Ferreres; 4 at Sotos de Alfaro (LR) Borja Sanz, Jesús Ucha.



Image nº 95: Cranes migrating over Jaca (HU). Photo: Cristina Ruiz.

-07/03/23: 11 circling at Badajoz, Mariano Cabrero; 15 at Castelló d'Empúries (GI) Albert Burgas; 34 over the River Manzanares (M) Christophe Pontegnie; 9 at Ojos de la Rifa (TE) Antonio Torrijo; 206 over Abia de la Episcopalía (CU) Rocío; 86 over Torres de Berrellén (Z) Esther Charles; 4 at Sotos de Alfaro (LR) Borja Sanz.

-08/03/23: 250 at Caminreal (TE) Antonio Torrijo; 38 at Vegas Altas (BA) Marin Kelsey; 400 at Belver de Cinca (HU) María Berna; 340 over San Mateo de Gállego (Z) Francisco J. Sampietro; 340 roost in rice fields at Capdesaso (HU) Eduardo Gracia; 800 roost at Sotonera reservoir (HU) Esther Yera; 14 roost at El Hoyo lagoon (AV) Cruz González, Arón Blázquez, José M^a García; 50 over Medellín (BA) Patrick Finch; 39 over Odèn (LL) Albert Martínez; 54 over Belmonte (CU) and 3 over Las Pedroñeras (CU) Joaquín Jiménez; 6 over Magaluf (IB) Toni Soler; 156 over Zaragoza, Luis Gracia, Thomas Rickfelder; 66 over Sallent del Gállego (HU); 28 at La Mueda reservoir (NA) Jon Sola; 18 over Nava de Arévalo (AV) Víctor Coello; 37 at San Salvador reservoir (HU) Victoria Torrente, Jesús Lavedán; 150 at Loreto reservoir (HU) Lourdes Hernández; 27 over El Perelló (T) Arnau Bonan.

-09/03/23: 3 roosted at El Balsón-Ojos Altos, Caminreal (TE) Antonio Torrijo; 2 over Les Llaunes (GI) Gilles Smeyers; 40 at Vinarós (CS); 210 roost in rice fields at Capdesaso (HU) Eduardo Gracia; 34 at El Plano reservoir (Z) María Berna; 3 at Tahivilla (CA) Juan Rodríguez; 5 over Salamanca, Vicente López; 214 at Lalveza (HU) Eduardo Gracia; 20 in the Ebro Delta (T) José Zamorano, Chemi Ibáñez, Eduardo de Juana; 63 at El Hito lagoon (CU) Joaquín Jiménez; 1 at L'Albufereta nature reserve, Alcudia (IB) Maties Rebassa; 2 at El Longar lagoon (TO) Javi Sola; 4 at La Aldea del Obispo (CC) Neil Renwick; 2 at La Lanteljuela (SE) Yeray Seminario, Rob Ripna, John Lowry, John Wilson; 10 over Coria (CC)

José L. Vázquez; 800 roost at Sotonera reservoir (HU) Esther Yera; 3,703 are censused at Gallocanta lagoon (TE/Z) S.A.R.G.A.



Image nº 96: Flock over El Galacho de Juslibol (Z) on 10 March. Photo: Daniel Lázaro.

-10/03/23: 700 migrating over Huesca, Francisco Quesada; 63 at Morantes reservoir, La Roca de la Sierra (BA) José L. Vinagre; 30 in rice fields at Selgua (HU) Alberto Gasquet; 230 over Curbe (HU) and 70 on the ground, Silvia Duque; 17 over Sariñena lagoon (HU) Eduardo Gracia; 510 at Dehesa de Abajo (SE) Joseph Bourget, José Zarapico; 230 at Cañizar lagoon (TE) Felipe Rosado; 8 over Madrid, Christophe Pontegnie; 25 at Alcázar de San Juan (CR) Pedro Bustamante; 330 over Almensilla (SE) Fernando E. Navarrete; 1,300 at Gallocanta lagoon (TE/Z) where 7 arrive on migration, Antonio Torrijo; 20 at Castelló d'Empúries (GI) Joan Ventura; 25 over Perelada (GI) Miguel A. Pérez-de-Gregorio; 159 over El Galacho de Juslibol (Z) 89 roost at Balsón-Ojos Altos, Caminreal (TE) Antonio Torrijo; 3 at Calera y Chozas (TO) José A. Calvo; 98 roost at Alcañiz saline lagoons (TE) Esther Yera; 25 at El Aguillón (HU) Victoria Torrente; 30 in rice fields at Selgua (HU) Alberto Gasquet; 4 at San Mateo de Gállego (Z) José M. Sánchez; 3 over El Pardo (M) José García; 10 over Aldeaseca (AV) Víctor Coello; 140 over Valdemorillo (M) John L. Muddeman; 72 at Caminreal (TE) Sergio Pérez.

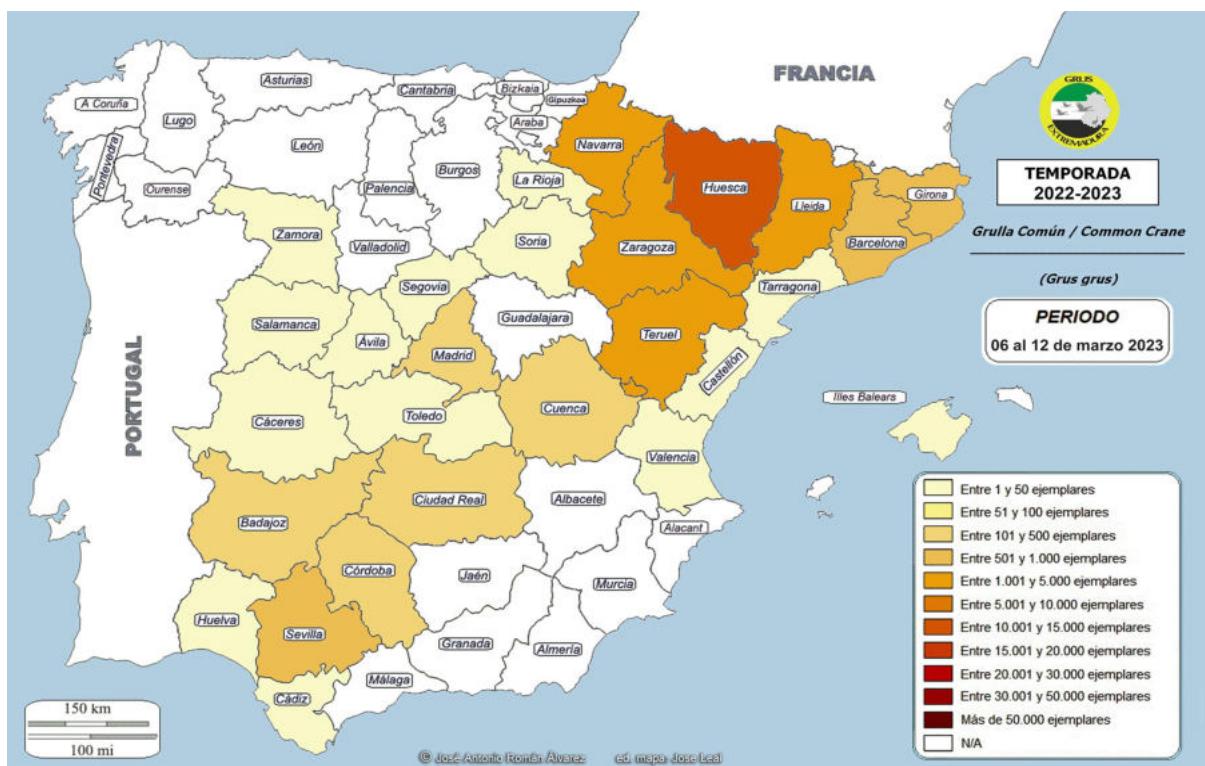
-11/03/23: 80 at Torremocha de Jiloca (TE) María Berna; 43 over Sevilla, Juan J. Negro; 220 over Ainsa (HU) Alberto Marín; 198 over Fombuena (Z) Dianka (DALMA); 60 over Orís (B) Susagna Crosas; 41 at Castelló d'Empúries (GI) Jordana Sanz-Rozas; 180 over Sant Martí d'Albars (B) Jordi Clavell; 1 at Llobregat Delta (B) Sergio Hoce; 25 over Palau-saverdera (GI) Joan Ventura; 63 over Sant Quirze de Pedret (B) Pablo Pascual; 35 at Riolobos weir (SA) Jaime Riviere; 125 at La Veguilla lagoon, Alcázar de San Juan (CR) José M. Salazar; 4 over Villeguillo (SG) Miguel A. García; 10 at Guarrastra lagoon, Tardajos de Duero (SO) Isabel Ortega, Juan L. Hernández; 21 over Robledo de Chavela (M) Fer Goytre; 134 over Cape

Creus (GI) Bernat Garriga; 300 over Ivars lagoon (LL) Miquel Rafa; 9 over Tudela de Segre (LL) Carles León; 90 over Algayón (HU) Carlos Perallón; 200 at El Pas reservoir (HU) Carles León; 37 over Barluenga (HU) Juan C. Albero; 34 over La Mueda reservoir (NA) Javi Sola; 45 over Pamplona (NA) Rajen Ayerra; 1 in El Rocío marsh (H) Joseph Bourget.

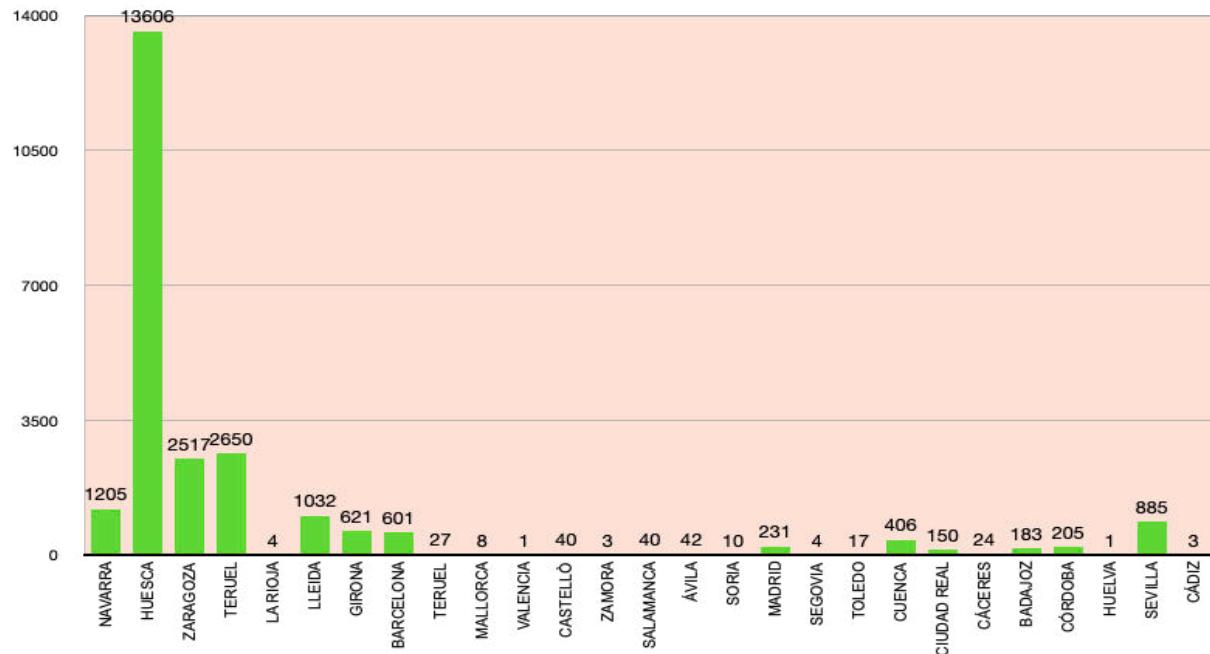


Image nº 97: Cranes over Oris (B). Photo: Susagna Crosas. Info: Ornitho.cat

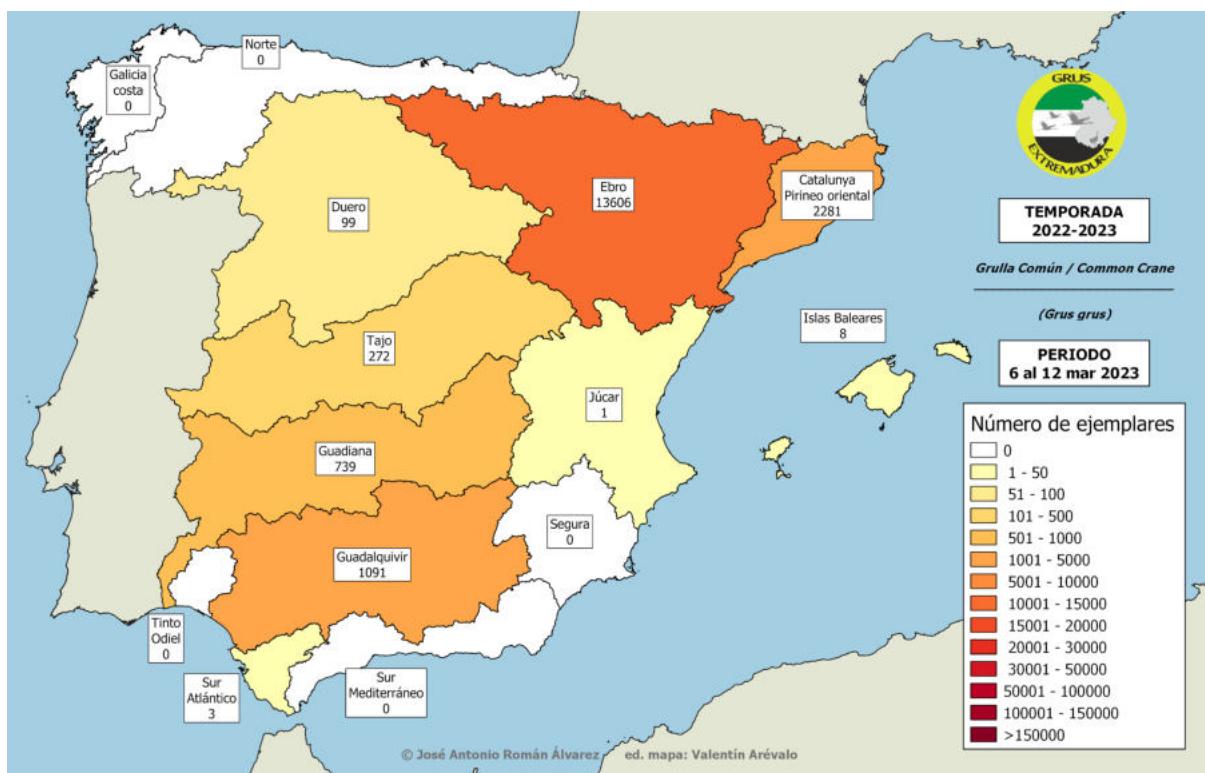
-12/03/23: 21 over Badajoz at 07:46h in fog, Joaquín Mazón; 5 over Abertura (CC) Pim O; 80 over Cuenca, Nuria Chacón; 41 in rice fields at Capdesaso (HU) Eduardo Gracia; 200 at Ojos de la Rifa, Caminreal (TE) Esther Yera; 9 at Torrellón reservoir (HU) Eduardo Gracia; 40 over Arce (NA) Juan I. Deán; 41 over El Pont de Suert (LL) Diego Callau; 21 over Navàs (B) Joan Gimestells; 34 over Algerri (LL) 600 over La Pobla de Segur (LL) Enric Marrodán, Paco Martínez; 80 over Baix Pallars (LL) Josep Piqué; 50 over Campdevànol (GI) Gerard Rigola; 2 at Santa Marta de Magasca (CC) Raúl Granados; 1 at Prat de Sant Jordi, Mallorca (IB) Dani Zamora; 38 over Àger pass (LL) Núria Vallberdú; 143 at San Salvador reservoir (HU) David Ardanuy; 8 at Loreto reservoir (HU) Javier Vera; 75 at Pitillas lagoon (NA) Pedro Arratibel; 36 over Sangüesa (NA) Jon Sola; 25 over Madrid, Sergio Calderón; heard at Fresnedillas de la Oliva (M) John L. Muddeman; 500 at Sotonera reservoir (HU) Silvia Duque, José Mª Canudo, Francisco Quesada, Daniel Enfedaque, Clara; 250 over Sant Agustí de Lluçanès (B) Joaquim Canal; 25 over Montmesa (HU) Francisco Quesada; 200 over Isona i Conca Dellà (LL) Josep Esteve; 1 at L'Albufera nature reserve (V) Juan Sorli; 3 at Villafáfila nature reserve (ZA) José J. Orduña.



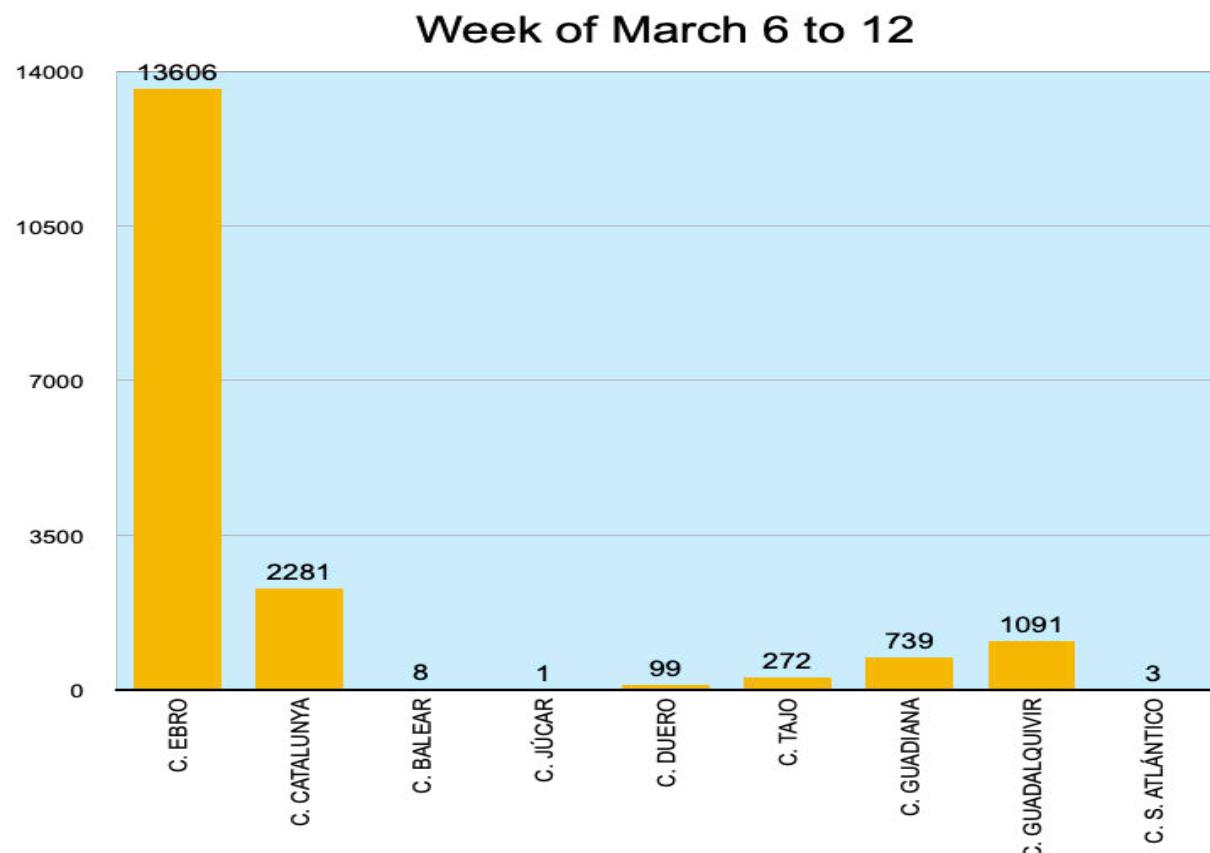
Map nº 37: Provincial migration between March 6 to 12
Week of March 6 to 12



Graphic nº 47: Migration by provinces, between March 6 to 12



Map nº 38: Migration by catchment areas, between March 6 to 12



Graphic nº 48: Migration catchment areas, between March 6 to 12

Migration is in its final phase, most of the wintering areas have emptied and only groups of juvenile and immature cranes remain in certain areas, such as Gallocanta lagoon.

-13/03/23: 10 at San Salvador reservoir (HU) Victoria Torrente, Jesús Lavedán; 208 at Caminreal (TE) and 91 at El Cañizar lagoon (TE) Antonio Torrijo; 400 at Sotonera reservoir (HU) Esther Yera; 1 at Figols i Alinyà (LL) Lluís-X. Toldrà; 1 at Palancoso lagoon (CC) Vicente Risco; 3 at Arrocampo (CC) Steve Hutchinson; 180 over Sangüesa (NA) and 4 at La Mueda reservoir (NA) Jon Sola; 49 at Curbé (HU) Silvia Duque; 60 at El Longar lagoon (TO) Julio de Huelbes.

-14/03/23: 5 over Gimèstells i el Pla de la Font (LL) Toni Leiva; 16 over Carmona (SE) José M. Méndez; 12 over La Mueda reservoir (NA) Jon Sola; 230 at Sotonera reservoir (HU) Juan C. Albero, Esther Yera; 50 at El Pas reservoir (HU) Alberto Gasquet; 19 over Sariñena lagoon (HU) and 125 at El Balsón-Ojos Altos (TE) Antonio Torrijo; >500 at Gallocanta lagoon (TE/Z) Carmina Franco; 6 over Cambrillos del Jarama (TO) Javier Nicolau; 42 at Pitillas lagoon (NA) Jorge Nubla.

-15/03/23: 900 at Gallocanta lagoon (TE/Z) Antonio Torrijo; 50 over Villar de los Navarros (Z) Ricardo Pérez; 10 over Fuendetodos (Z) Ricardo Pérez; 70 over Mayuela (Z) Laila Aranda; 6 at Castelló d' Empúries (GI); 5 at Gimèstells i el Pla de la Font (LL) Toni Leiva, Albert Cama; 1 at La Aldea del Obispo (CC) Neil Renwick; 31 over Mendigorria (NA) Jesús M. Lekuona; 180 over Abay (HU) Daniel Barceló; 1 over Pamplona (NA) Rajen Ayerra; 50 over Sant Pere de Torellò (B) Lluís Copete; 30 over Abizanda (HU) Jan Verhoeven; 9 at La Janda lagoon (CA) Jim Todd.



Image nº 98: Group of immature cranes near Bello (TE). Photo: Javier Mañas

-16/03/23: 1 over Coria (CC) Miguel Todón; 115 over Murillo de Gállego (HU) Pablo Vallés; 4 over Villarreal de San Carlos (CC) Martin Kelsey; 50 at Pozuelo (Z) Esther Charles; 5 at Almudévar (Z) Javier López; 125 at Gallocanta lagoon (TE/Z) Francisco J. Sampietro; 12 over Castilblanco (BA) JuanMa Jiménez; 10 over Colmenar Viejo (M) David Díaz.

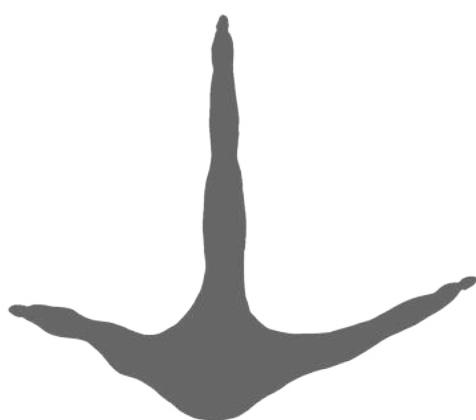
-17/03/23: 1 juvenile at El Campazo lagoon (CC) Neil Renwick; 1 juvenile at Alcollarín reservoir (CC) Martin Kelsey; 6 over Pamplona (NA) Rajen Ayerra; 3 at Pitillas lagoon (NA) Enrique Villaespesa; 182 at Gallocanta lagoon (TE/Z) Sabi Martínez, Antonio Torrijo.

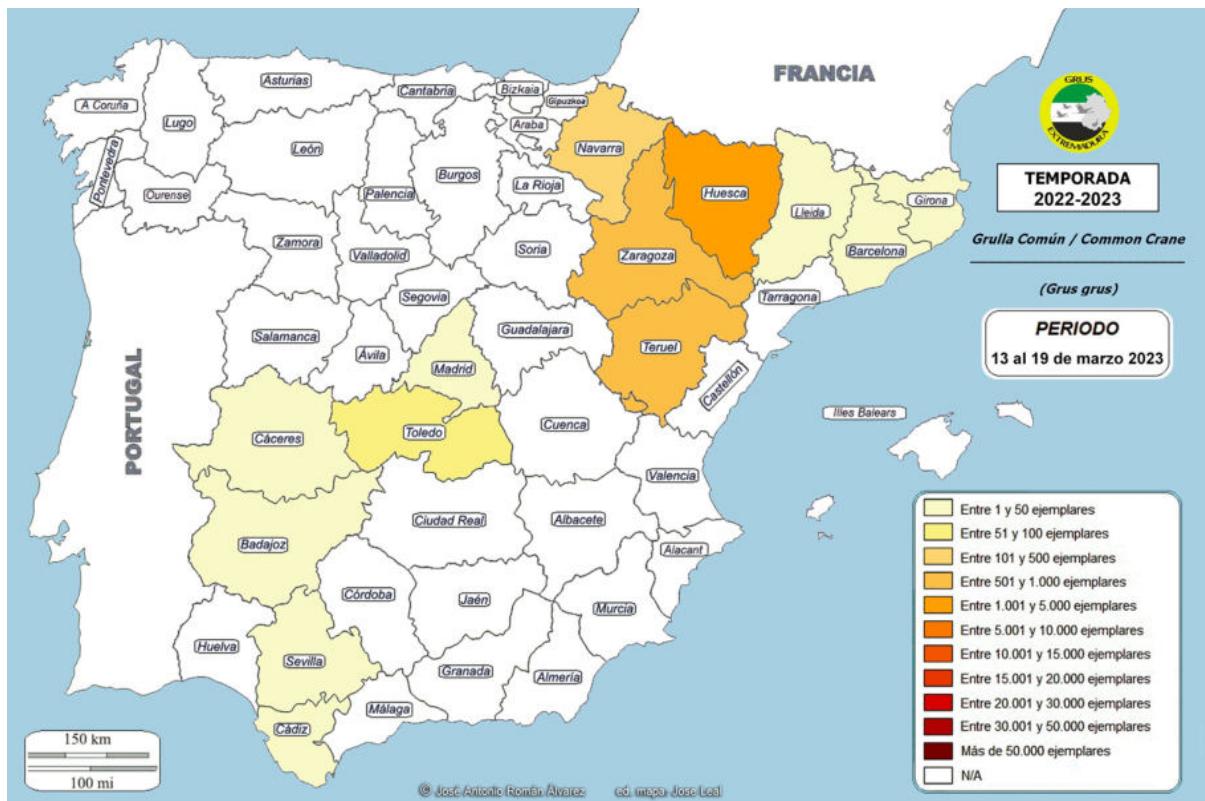
-18/03/23: 4 at Larga lagoon, Villacañas (TO) Ángel Velasco; 420 roost at Sotonera reservoir (HU) Francisco J. Quesada.

-19/03/23: 219 at Sodeto (HU) Eduardo Gracia; 110 over Caminreal floodplain (TE) Antonio Torrijo; 15 at Vegas Altas (BA) Ángel López; 3 at Sierra Brava reservoir (CC) Martín Kelsey; 4 at Chica lagoon, Villafranca de los Caballeros (TO) M Carmen Comendador; family with two juveniles at Los Codos, Navalvillar de Pela (BA) Anabel Moreno; 7 at La Mueda reservoir (NA) Jon Sola, Javi Sola; 170 roost at Alboré reservoir (HU) Silvia Duque.

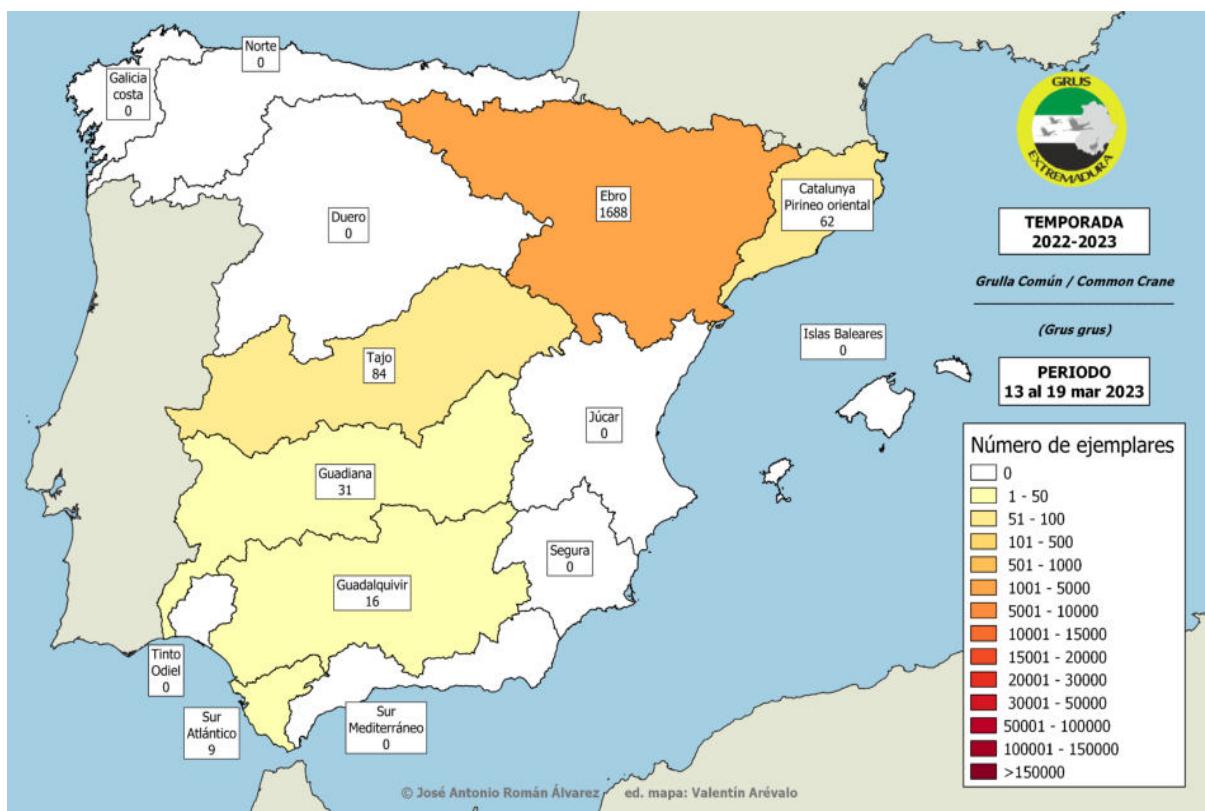


Image nº 99: Young cranes at the Vegas Altas (BA). Photo: Ángel López





Map n° 39: Provincial migration and distribution between March 13 to 19



Map n° 40: Migration and distribution by catchment areas between March 13 to 19

-20/03/23: 6 at Artieda (HU) Javier López; 70 over rice fields at Capdesaso (HU) Eduardo Gracia; 1 at Los Juncos saltmarsh, Bujaraloz (Z) Conchi Esteban; 72 over the River Cinca, Castejón (HU) Carles Saurina; 3 at Aldeaseca (AV) Víctor Coello; 7 at Guerrera lagoon (SO) Juan P. del Álamo, Jesús Ruiz.

-21/03/23: 3 at Aldeaseca (AV) Víctor Coello; 2 between Alcolea de Tajo (TO) and Calera y Chozas (TO) Gustavo A. Vázquez (ARDEIDAS); 5 juveniles at Artieda (HU) Julián López; 22 over Ayerbe (HU) Juan C. Albero; 1 at Castrejón reservoir (GU) Peter Carr.

-22/03/23: 1 at Hoya las Caras, Pétrola-Corral Rubio (AB) Lucas de las Heras; 117 at Vega de Caminreal (TE) Antonio Torrijo; 1 at Larga lagoon, Villacañas (TO) Javier Nicolau; 10 at La Mueda reservoir (NA) Jon Sola; 6 at Zorita (CC) JuanMa Jiménez; 17 at Embid (GU) Javier Gómez; 15 at Monteagudo de las Vicarías reservoir (SO) Jesús Ruíz; 1 at Herrera lagoon (SO) Sergio Pérez .

-23/03/23: 1 at Pétrola-Corral Rubio (AB) Marcelo Quesada; 119 at Gallocanta lagoon (TE/Z) Francisco J. Sampietro, Carmina Franco; 19 at Montmesa (HU) Juan C. Albero; 1 at Alcollarín reservoir (CC) Sandra Aarts, Lotte Keularts; 25 over Baix de Pallars (LL) Lina Ratia; 6 at Loreto reservoir (HU) Arturo Bobed.

-24/03/23: 75 at San Salvador reservoir (HU) Kees Woutersen; 35 at Loreto reservoir (HU) Javier Vera; 1 at Bujaraloz saltflats (Z) Conchi Esteban; 6 over Pamplona (NA) Sandra Pineda; 4 over Pamplona (NA) Gorka Gorospe; 4 at Los Valverde pool (BA) Antonio Mendoza.

-25/03/23: 61 at Caminreal (TE) Antonio Torrijo; 1 at Oropesa (TO) Harry Hosper; 99 roost at Alboré-Sotonera (HU) Francisco J. Quesada, José Mª Canudo, Clara; 2 over Jadraque (GU) Alfonso Llamas; 1 at Matamala de Almazán (SO) Juan P. del Álamo; 1 over Tudela (NA) Jacob Mead; 17 at Dos Reinos lagoon (NA) Andrés Molina, Fer Goytre; 12 over Cambrils (T) Jaume González; 40 at Lechago reservoir (TE) Antonio Rubio, David Falomir, Gonzalo Peña.

-26/03/23: 6 over Torres de Berrelén (Z); 31 over Burguete (NA) Gaspar Zaldua.



Image nº 100: Flock of cranes at Gallocanta (Z). Photo: Carmina Franco.

-27/03/23: 6 at Chica lagoon, Villafranca (TO) M^a José Valencia; 9 at Pitillas lagoon (NA) Julen Santa Cristina.

-28/03/23: 28 at Caminreal (TE) Antonio Torrijo; 70 over Huesca, Kees Woutersen; 68 at Gallocanta lagoon (Z) Carmina Franco, Antonio Torrijo; 27 at San Salvador reservoir (HU) Victoria Torrente, Jesús Lavedán

-29/03/23: 23 over Fuentes Claras (TE) Antonio Torrijo; 3 at Aldeaseca (AV) Víctor Coello; 18 at Buendía reservoir (GU) José L. Ramos; 3 at Lavajares lagoon (SA) Arón Blázquez; 1 at Monteagudo de las Vicarías reservoir (SO) Juan L. Hernández; 10 at Obando (BA) Lucía Vita; 1 at Lupiñén-Ortilla (HU) Kees Woutersen.



Image nº 101: Cranes at Buendía reservoir (GU). Photo: José Luis Ramos.

-30/03/23: 42 arrive at Almuniente rice fields (HU) Francisco J. Quesada; 2 at Artieda (Z) Javier López; 15 at Caminreal (TE) Antonio Torrijo; 5 at Monteagudo de las Vicarías reservoir (SO) Jesús Ruiz.

-31/03/23: 14 at Navalvillar de Pela (BA) Ángel López; 100 at La Zaida lagoon (Z) Josep Manchado; 200 at Gallocanta lagoon (TE/Z) Miguel Martín.



Image nº 102: Cranes in dehesa at Navalvillar de Pela (BA). Photo: Ángel López.

-01/04/23: 1 at Brozas (CC) Álvaro Gómez; 2 at Perales lagoon (M) Jeff Slaughter; 6 at Buendía reservoir (GU) Xurxo Piñeiro, Ricardo Rodríguez; 70 over Medinyà (GI) Carles Oliver.

-02/04/23: 5 at Caminreal (TE) Antonio Torrijo; 5 at Montmesa (HU) Silvia Duque, Esther Yera, Juan, Francisco J. Quesada; 3 at Lechago reservoir (TE) Felipe Rosado; 9 at Pitillas lagoon (NA) Ana Goenaga, Xabi Elizondo.

-03/04/23: 47 at San Lorenzo de Flumen (HU) Eduardo Gracia; 10 at El Balsón-Ojos Altos (TE) Antonio Torrijo; 5 following the River Pas upstream at Aés (CT) Alejandro García; 1 at Aldeaseca (AV) Víctor Coello; 4 at Sotonera reservoir (HU) Juan C. Albero; 5 at Cella (TE) David Mansilla.

-04/04/23: 2 at Dos Reinos lagoon (NA) Ana Morales; 12 at La Mueda reservoir, Aibar (NA) Jesús M. Lekuona; 37 in rice fields at Capdesaso (HU) Eduardo Gracia; 8 at Retuerta del Bullaque (CR) Gerardo García; 1 at Sotonera reservoir (HU) where 35 arrive (those from Capdesaso?) at 18:30h, Jorge Lardiés, Esther Yera, José M. Canudo, Juan L. Muñoz; 2 at Nagore reservoir (NA) Goroati.



Image nº 103: Cranes in dehesa at Retuerta del Bullaque (CR). Photo: Gerardo García.

-05/04/23: 7 at Caminreal (TE) and 33 at Gallocanta lagoon (Z) Antonio Torrijo; 3 at Montmesa (HU) Francisco J. Quesada, Esther Yera, Silvia Duque; 6 at San Salvador reservoir (HU) Victoria Torrente, Jesús Lavedán.

-06/04/23: 6 at San Lorenzo de Flumen (HU) Eduardo Gracia; 2 at Barasoain (NA) Moisés Zozaya; 12 at Dos Reinos lagoon (NA) David Miqueleiz; 9 at La Mueda reservoir (NA) Javi Sola; 6 at Ráfales reservoir (HU) Jesús Lavedán, Silvia Duque, Francisco J. Quesada, Juan L. Hernández, Esther Yera; 1 on the Llobregat delta (B) Luis Miranda; 1 at Cubillo lagoon (SO) Jesús Ruíz, Juan L. Hernández.

-07/04/23: 1 at Valverde de Mérida (BA) Fátima Romero.

-08/04/23: 6 at San Salvador reservoir (HU) Jorge Lardiés; 5 go over Pamplona (NA) Rajen Ayerra.

-09/04/23: 2 at Sotonera reservoir (HU) Silvia Duque, Esther Yera, Juan Muñoz; 8 at Tozuelo, Trujillo (CC) Juan García.

-10/04/23: The Polish crane is still at Aldeaseca (AV) Víctor Coello; 2 over Dos Reinos lagoon (NA) David Miqueleiz; 6 going high at San Salvador reservoir (HU) Jorge Lardiés; 6 at Gallocanta lagoon (Z) Antonio Torrijo; 3 at Pitillas lagoon (NA) A. Galache; 1 at Valverde's pond, Villanueva de la Serena (BA) Álvaro García; 3 at Cabeza del Buey (BA) Fernando Yuste; 2 at the Arroyoconejos reservoir, Llerena (BA) Julián Cendrero; 2 at the S. Lorenzo de Flumen (HU) Eduardo Gracia; 12 at the Mueda pond (NA) Jesús M. Lekupna..



Image nº 104: Cranes at Dos Reinos lagoon (NA). Photo: David Miqueleiz.

-11/04/23: 2 at Artieda (Z) Javier López; 11 at the Gallocanta lagoon (Z/TE) José M. Pueyo; 14 at the Mueda pond (NA) Rajen Ayerra, Jon Sola; 1 at the La Puebla de Montalbán (TO) José A. Calvo; 6 at the S. Salvador reservoir (HU) Jan Verhoeve, Jorge Lardiés, Victoria Torrente, Jesús Lavedán; 6 at Monzón (HU) Jorge Lardiés, Jesús Lavedán.

-13/04/23: 1 at the La Loteta reservoir (Z) María Berna; 7 at the Sotonera reservoir (HU) Rajen Ayerra; 13 at the Caparroso rice fields (NA) Jon Sola, Javi Sola.

-14/04/23: 7 at Las Cuerlls (Z), 1 at Bello (TE) and 2 at Gallocanta (Z) Carmina Franco, 7 young birds at the La Rada rice fields (NA) Jesús M. Lekuona, Ricardo Rodríguez; 8 young birds at the Sotonera reservoir (HU) Jorge Lardiés, Silvia Duque, José M. Canudo, Rajen Ayerra.



Image nº 105: Young cranes at the La Rada pond (NA) Photo: Jesús M. Lekuona

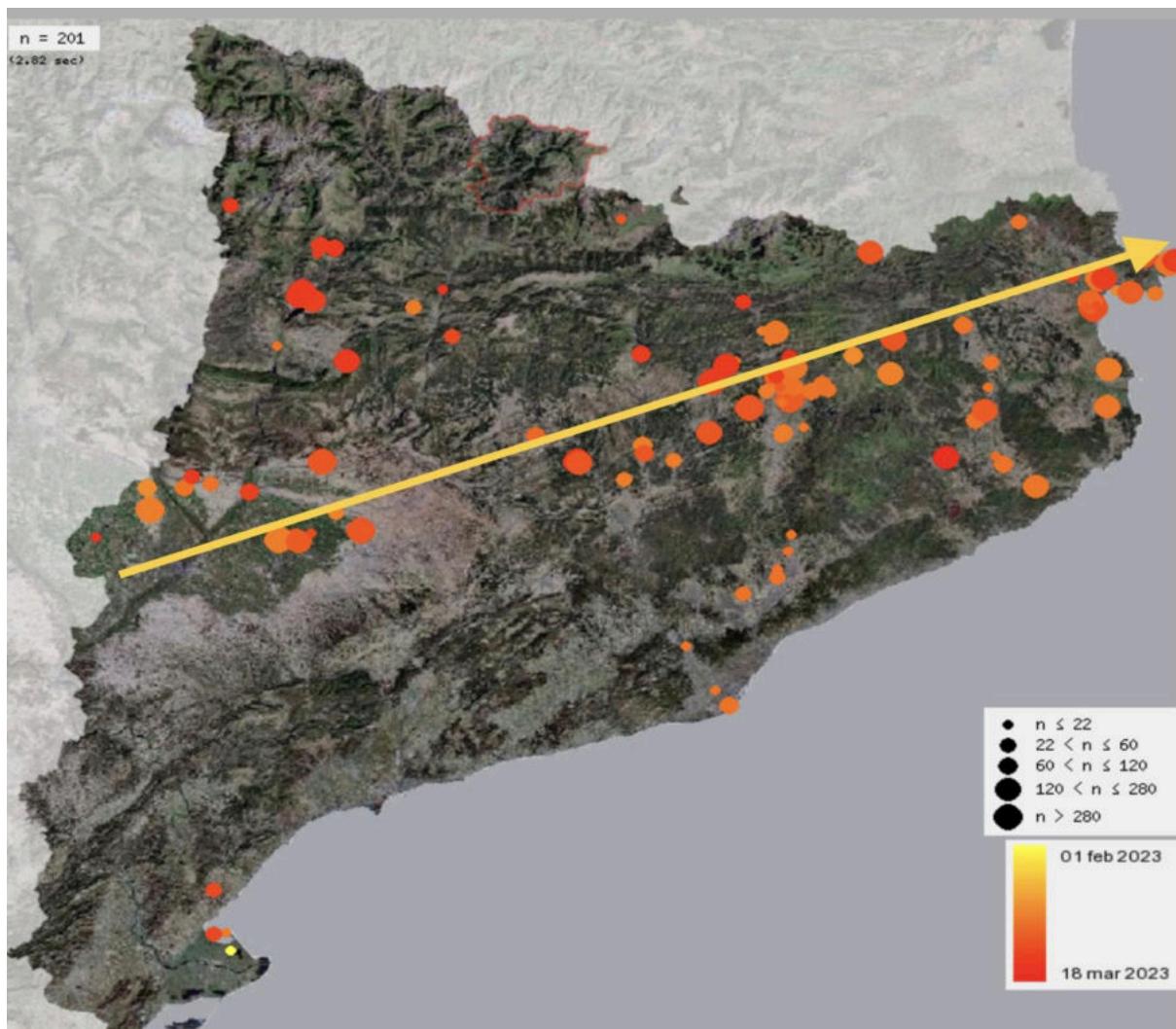
The prenuptial migration passed quickly and decisively. Some sporadic movements in early February were rather anecdotal. North-easterly winds probably delayed the departure from the wintering areas. When this changed to the north-west, migration began.

The key date was 20 February, although some days before there was a small movement of some 5,000 cranes which, influenced by the prevailing wind, chose to go over Soria and cross the Pyrenees through Navarra, and a few hundred even went through the Basque Country (Araba), without going to Gallocanta lagoon. Migration was noticeable through Burgos province, which generally sees few cranes in this period.

From the 20th there was a widespread movement leaving the wintering quarters, which were left almost empty in just 10 days. It has been shown that they firstly left the most northerly area (in the Castiles), then from Extremadura, Toledo, and the Andalusians being the last to leave, as well as some from Castile-la-Mancha.

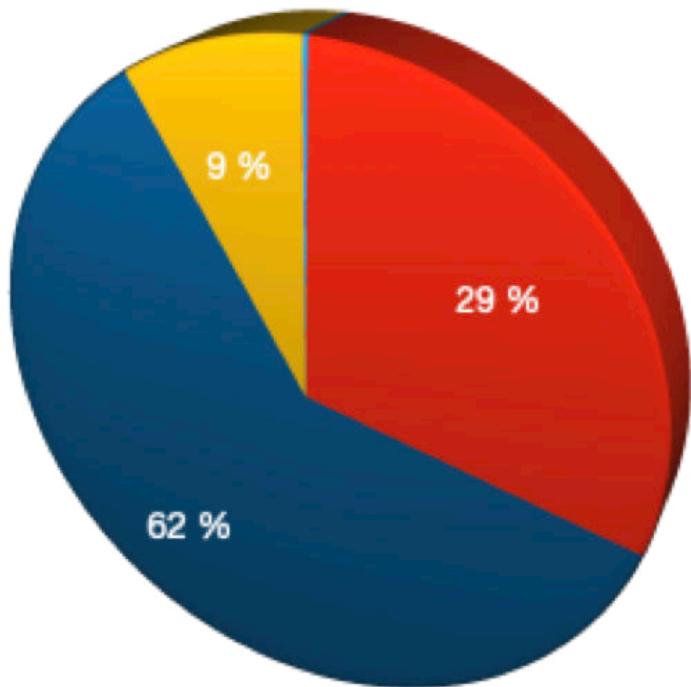
The bulk were channelled through Gallocanta, following the Sotonera route, in Huesca, from where the majority crossed the Pyrenees, although several thousand chose to cross from Navarra, and in the final phase of the migration a good number headed through Catalonia.

500 cranes (0.25%) crossed the Basque Country in the week 13-19 February, and are the only records we have from this autonomous community. 65,603 birds (36%) crossed Navarra, and 95,627 (53%) crossed the Aragonese Pyrenees from Huesca. Catalonia was crossed almost west-to-east, (although there were crossings through Lleida and surely from Andorra), from Creus Cape towards the Gulf of León, from where they headed into the south of France and the north of Italy to the Balkans. The total recorded was 19,629 (11%). Very few went via the east coast and Balearic Islands, just 53 birds (48 through the islands).

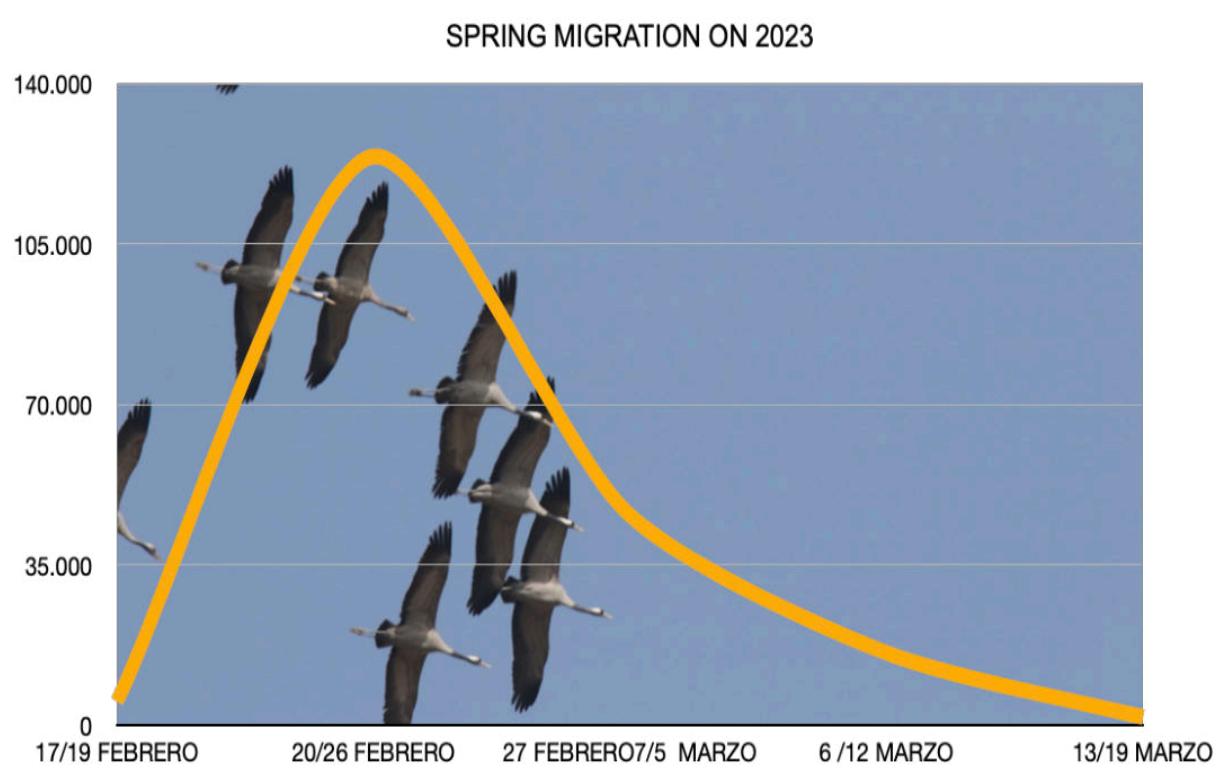


Map nº 41: Migration through Catalonia. Source: Ornitho.cat

The total number of birds recorded during this migration journey was **192,717**, of which 124,138 (64%) were between the 20th and 26th of February, and 46,824 (24%) between 27 February and 5 March. 88% of the cranes left the peninsula in just 14 days, from 20 February to 5 March, although some were held up at Gallocanta due to snowfalls recorded in the first days of March.

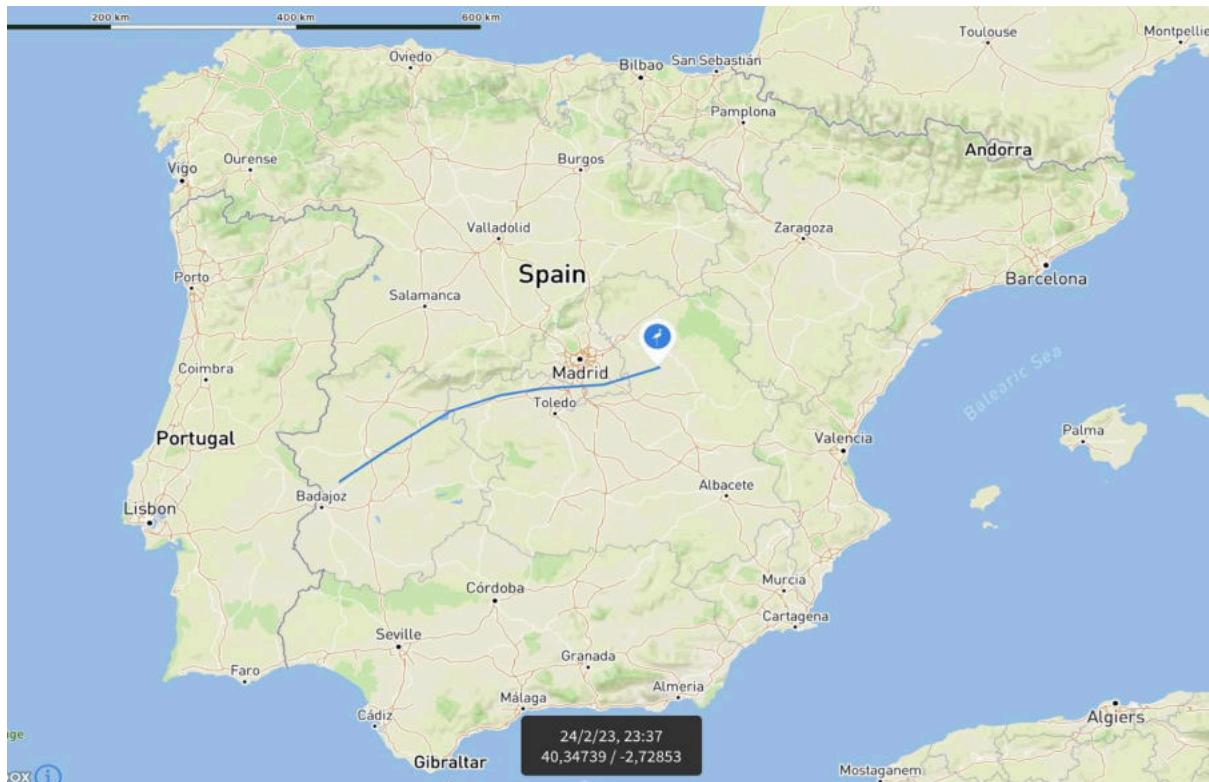


Graphic nº 49: Distribution of the prenuptial migration by autonomous community in 2023.



Graphic nº 50: Evolution of the migration between 17 February and 19 March.

Thanks to the GPS/GSM devices that some birds carry, we can follow the migration of some birds in real time, such as the male of a Lithuanian pair that spent all winter in Badajoz, in the dehesas of La Roca de la Sierra and Villar del Rey. These left on 24 February at 12:20h and went directly to Valdecañas reservoir (CC) and then to Buendía reservoir (GU), where they arrived at 21:06 after a journey of 370 km at an average speed of 56 km/h.

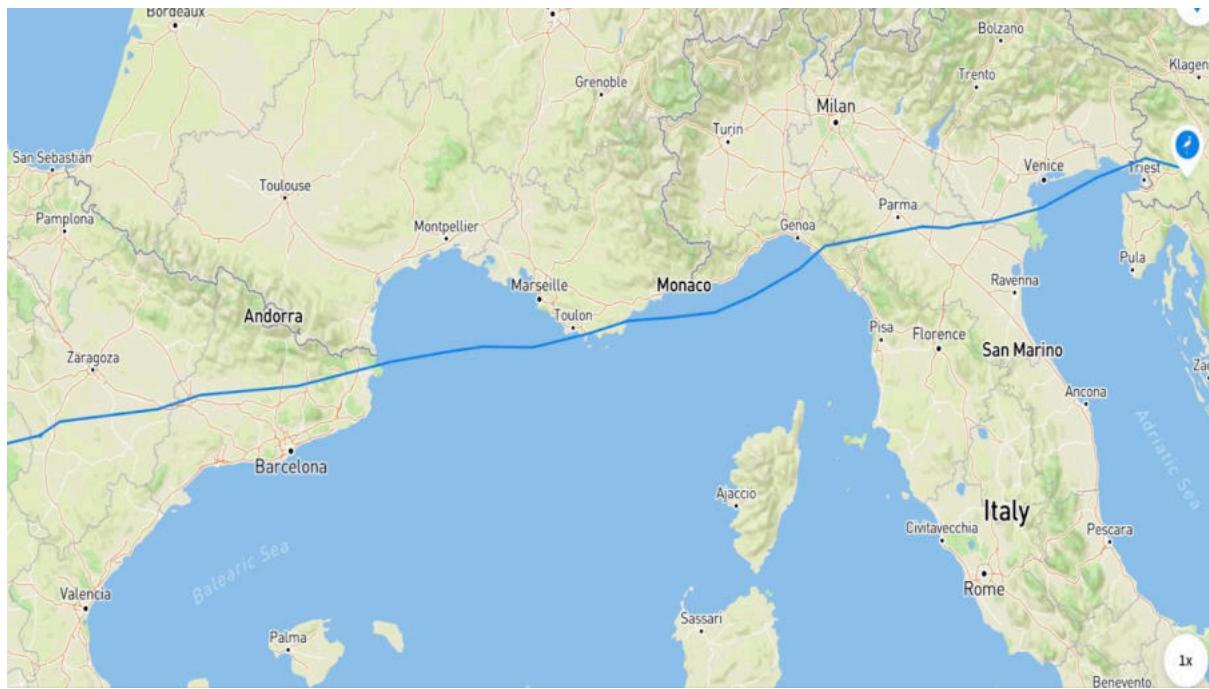


Map nº 42: Route taken to Buendía reservoir (GU). Source: Animal Tracker.

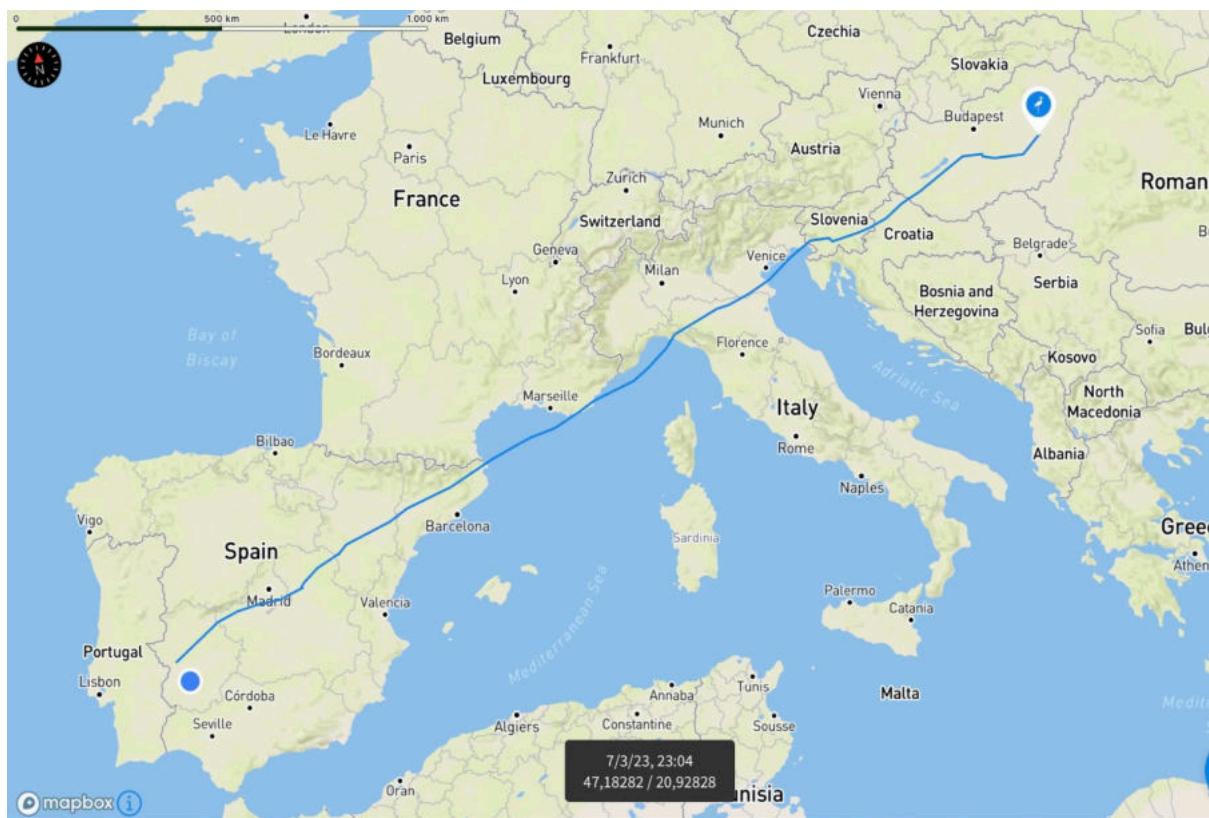
The following day (25th) they left and arrived at Gallocanta lagoon at 16:36h, covering 120km, and stayed there several days, held up by unfavourable winds and afterwards by snow, despite trying to set off and returning to the lagoon. Finally, they managed to leave the lagoon at 11:11h on 4 March, heading east-northeast, missing Sotonera, flying over Lleida city and heading determinedly towards Roses and Cape Creus, to reach the Gulf of León and continuing to travel throughout the night, without stops, passing Toulon, in France, flying over the Gescle estuary at 00:38h, flying over San Marino at 01:51h and arriving at Recco, Italy, at 07:21h, then crossing the north of the country to reach the Adriatic Sea at 14:19h, entering Slovenia at 16:49h and at 19:49h they landed at Cerknica lake after covering 1,400km in 30 hours, giving an average of 47km/h. They travelled 1,900km from Extremadura.

The nest day (6th) they left at 10:10h and arrived at Szabadszáliás in Hungary at 20:19h, rested and then restarted the journey at 05:49h and stopped at Busca, to the south of the Hortobágy

National Park, at 11:34h, having covered 2,400km from their wintering area. On the 10th they crossed to Slovakia, staying near the River Latorica, to the east of Brehov until 17 March, when they left at 11:06h, arriving in Poland at 13:00h and resting at Las Wolski, in the east of the country. They left the locality at 08:05h and arrived at 17:21h in their breeding area at Büda, Lithuania.



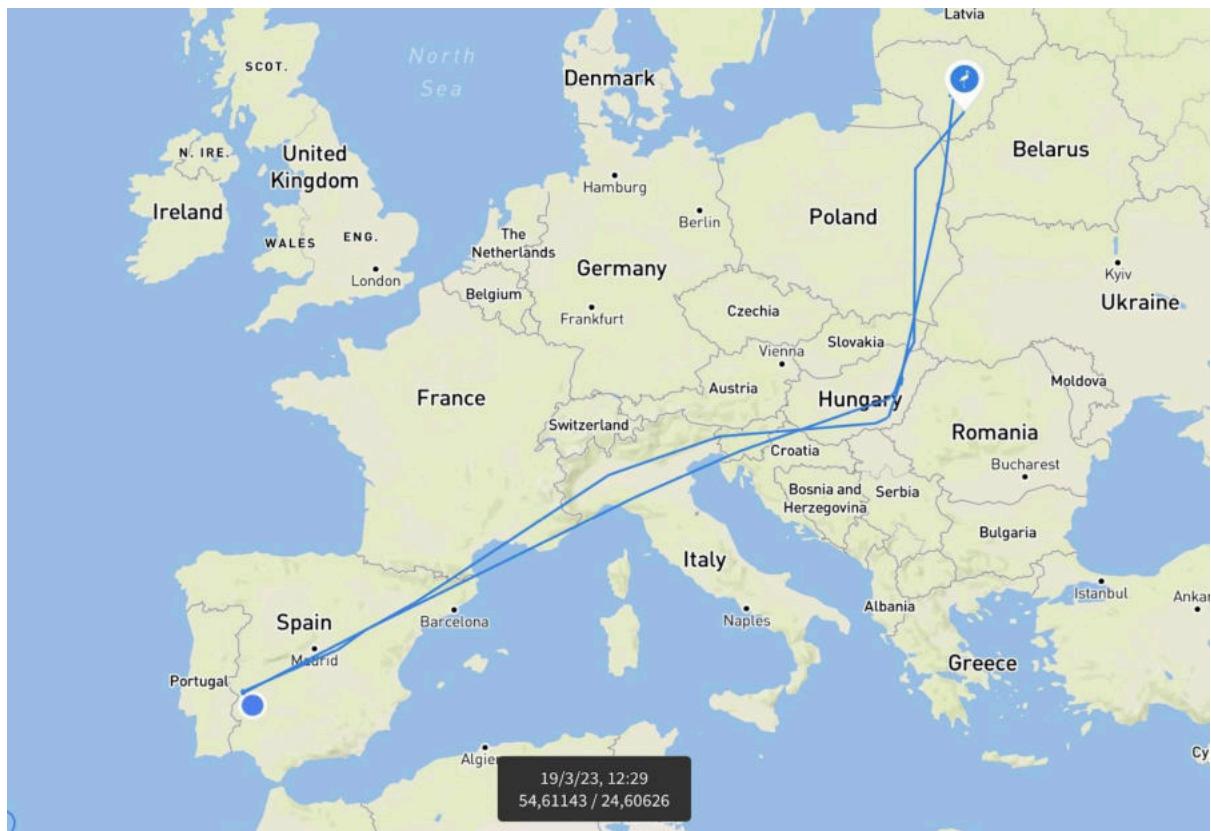
Map n° 43: Route taken from Gallocanta between 5 and 6 March. Source: Animal Tracker.



Map n° 44: Route taken from Extremadura to Hungary. Source: Animal Tracker.

The route taken by these cranes is practically the same as they took in the autumn. They were in Lithuania until 20 September, and on the 21st they were in Hortobágy National Park

in Hungary, where they stayed until 7 November, when they started their journey to La Roca de la Sierra in Badajoz, arriving on 13 November.



Map n° 45: Routes of the Lithuanian cranes in both migratory periods, September 2022 to March 2023. Source: Animal Tracker.





Photo nº 106: Cranes going over Almorchón castle (BA) to their roost. Photo: Juan José Ruiz.



Image nº 107: Pair of courting cranes in dehesa at Cuncos (BA) on the days before departing. Photo: Alfonso Pérez.