Protocol to the census of Yellow-legged Gulls *Larus michahellis* nesting in Portugal, 2021

1. How to participate

Anyone interested in participating should contact the census coordination team, indicating the county(ies) in which they intend to participate. Ideally, volunteers should have some experience in bird censuses and have binoculars.

Contacts:

Nuno Oliveira (SPEA) – <u>nuno.oliveira@spea.pt</u> Hany Alonso (SPEA) – <u>hany.alonso@spea.pt</u>

In the case of the Protected Areas of Portugal mainland, the work will be coordinated by the Institute for the Conservation of Nature and Forests (ICNF), and for this purpose the contact should be addressed to Vítor Encarnação (vitor.encarnação@icnf.pt).

In the case of the Autonomous Region of Madeira, the work will be coordinated by the IFCN.

In the case of the Autonomous Region of the Azores, the work will be coordinated by DRAM – Directorate of Maritime Affairs (Maria Magalhães - maria.cc.magalhaes@azores.gov.pt) and SPEA.

2. When to count

The counting of this census should occur throughout the month of May. Only one visit should be made to the sites identified as relevant to the nesting of the species, with an effort being made to cover the whole (or most) of the area to be monitored. Not being mandatory, a second visit may be made to the monitored areas, during the last three weeks of the month of June, where the focus should be on registering the presence of non-flying juveniles (seen or heard).

3. Monitoring areas and how to do it

It was decided to define the areas to be monitored by each observer according to the **limits of the "freguesias"**. Depending on their availability, each observer may be responsible for monitoring one or more "freguesias". The relevant areas for this monitoring include: natural areas with historical records of nesting of the species (islands and rocky coast), other natural or semi-natural areas with potential habitat for the nesting of the species (e.g., salt marshes); and urban agglomerations where the nesting of the species is referenced (confirmed or suspected).

The collaborator is asked to register all **active nests** (with birds incubating, or with the presence of eggs or chicks) detected during the census and the location of each one (or of the group, if they are close to each other and are numerous), with the help of GPS (the GPS available on mobile phones may be used). In addition to the **confirmed nesting situations** (presence of incubating birds, eggs or chicks), the observer must also record the **likely nesting situations** (territorial calls; agitated or anxious behaviour; aggressive behaviour towards people or other gulls) or **nesting possible** (presence of isolated individuals or in pairs in nesting habitat). The observer should also use binoculars (and a telescope, if available) to assist him in this task, especially for prospecting nests that are in more inaccessible areas. The details of the methodology may vary according to the type of area monitored:

Urban areas

The collaborator must visit the areas with the greatest potential for nesting (historic centre; fishing port, fishing dock, marina and surrounding housing areas). In addition to the presence of individuals of the species, attention should be paid to possible indirect signs of nesting (considering that in most situations the nests may not be visible), such as territorial calls, greater aggressiveness of some individuals, dispute and interactions between individuals. If there is only evidence of indirect signs, if possible, the collaborator should contact the residents / owners of the building to try to confirm the nesting. Whenever a busy nest is found (with eggs or chicks, or with an individual incubating), the location of the nest must be recorded on the GPS, and additional information is removed to allow its subsequent location (eg, on the roof of nr X on Y street; on the roof of the Mini-Preço building). Especially in urban areas, a second visit to previously identified locations (during the last three weeks of June) may be useful, to confirm the presence of juveniles.

Rocky coast of mainland Portugal

On the continental rocky coast, collaborators must use the car to travel between areas where there is adequate habitat for nesting. In these areas, the collaborator must travel on foot, parallel to the coast, either on the beach or at the top of the cliff. Whenever prospecting has to be done from the top of the cliffs, you should never jeopardize the your own safety. If it is not possible to monitor a potential area safely, do not do it!!! The location of each nest or set of nests must always be georeferenced, with the help of a GPS or mobile phone. On cliffs where many seagulls are present, it may be useful to find an adequate and safe observation point, with good visibility of the area to be sampled, and with sufficient distance to avoid disturbing the birds. From that point, waiting for the birds to calm down, the collaborator must count the number of nests with birds to incubate or with chicks, as well as probable nesting situations, in which the nest may not be visible.

Estuaries and saltpans

The collaborator should seek to identify areas with a greater presence of individuals of the species or individuals with reproductive behaviour, and in these areas, make a more exhaustive monitoring for the detection and quantification of active nests. Prior contact with the owner / worker (saltpan, aquaculture) is advisable and can be useful in identifying likely nesting areas.

Autonomous Region of the Azores

In the Azores, colonies will be identified and, whenever possible, the number of breeding pairs will be quantified, by returning to the islands by boat across the archipelago. Inaccessible colonies will be identified for later counting / estimation from land (nest counting or aerial image using a drone).

4. Other observations

It is also requested to collect additional information about the nesting of the **Lesser Black-backed Gull** *Larus fuscus*.

Additional information about the nesting of other species that may be present in the potential nesting areas of Yellow-legged Gulls (e.g., Peregrine Falcon, Cruet, Little Tern, Kentish Plover, herons) can also be collected. In the Azores, information about the nesting of terns, starlings and domestic pigeons may also be collected.

5. Recording the observations

Upon finding an active nest (with birds incubating, or with the presence of eggs or chicks), set of active nests or possible nest, the collaborator must record his/her observation, defining a unique ID (with a number and name of the site) to record the following information:

- The location of the sighting or counting area Latitude, longitude (if appropriate), district / region, "freguesia" or place;
- Nests number of nests or birds counted. In the second case, this option must be recorded in the notes:
- Evidence of reproduction birds to incubate, eggs or chicks present, possible breeding pair, couple with territorial behaviour, aggressive behaviour;
- Nesting confirmed (adults to incubate, eggs and / or chicks), probable (one or more individuals in territorial calls, with agitated / anxious behaviour, aggressive behaviour towards people or other gulls), possible (isolated individuals or in pairs in nesting habitat).

ID	Latitude	Longitude	District	Freguesia	Local	Nests	Evidence of reproduction	Nesting	Notes
1_Alges	xxx	xxx	Lisbon	UF Algés, Linda- a-Velha e Dafundo	Av. República	2	Bird to incubate	Confirmed	Two active nests on top of the roof where the supermarket is located
2_Cascais	xxx	xxx	Lisboa	UF Cascais e Estoril	Boca do Inferno	1	Chicks present	Confirmed	One nest in the cliff
3_Espichel	xxx	xxx	Setúbal	Sesimbra (Castelo)	Praia da Baleeira (Cabo Espichel)	1	Possible pair	Possible	Two gulls sit in the top of the cliff, no nesting confirmation
4_Sesimbra	xxx	xxx	Setúbal	Sesimbra (Santiago)	Mercado de Sesimbra	1	Pair with territorial behaviour	Probable	Not confirmed nesting on the top of the supermarket roof
5_Almograve	xxx	xxx	Beja	Almograve	A norte do cabo sardão	3	Agressive behaviour	Probable	Probale nesting in a cliff
6_Barreta	xxx	xxx	Faro	UF Faro	Ilha Barreta	43	Birds incubating eggs/eggs/chicks	Confirmed	Breeding colony

6. Sending the data

In the case of protected areas and other areas monitored by the ICNF, the data should be sent to vitor.encarnacao@icnf.pt.

In the remaining cases, the data should be sent to nuno.oliveira@spea.pt, in a digital format (Censo_gaivota_2021_form.xlsx with data and coordinates or Censo_gaivota_2021_form.xlsx + kml / shapefile), or through the electronic form (http://bit.ly/censo-gaivotas-2021). However, collaborators who prefer can enter the census data directly on the PortugalAves eBird platform, provided that they include all the information, place a reference to the Census (CENSO GAIVOTAS 2021) and share the observation with nuno.oliveira@spea.pt.

In the case of the Autonomous Region of the Azores, the work will be coordinated by DRAM and SPEA, and the data should be sent to a contact to Maria Magalhães (maria.cc.magalhaes@azores.gov.pt) or Nuno Oliveira (nuno.oliveira@spea.pt).