The role of Environmental legislation in Yelkouan Shearwater Conservation



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LIFE Arcipelagu Garnija project Closing Webinar: 9th July 2020

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Birds Directive 2009/147/EC

- Yelkouan Shearwater listed in Annex I to the Birds Directive (Schedule I of the Wild Birds regulations): subject of special conservation measures concerning their habitat, including the designation of 'Special Protection Areas' (SPAs)
- Within the framework of these regulations, terrestrial and marine SPAs designated for the protection and conservation of the three breeding seabirds.
- Directive calls for research as a basis for the protection/management of native bird populations (Art 10) and reporting of species status and trends (Art. 12).





Birds Directive 2009/147/EC: Bird species' status and trends report format (Article 12) for the period 2013 - 2018

Population size	Breeding pairs	1770 -2580
	short-term trend (last 12 years)	Increasing
	long-term trend (since c. 1980)	Stable
Breeding distribution	short-term trend (last 12 years)	Stable
	long-term trend (since c. 1980)	Stable

Marine Strategy Framework Directive 2008/56/EC



- Protection of seabirds is covered by the EU Marine Strategy Framework
 Directive (Marine Policy Framework Regulations S.L. 549.62).
- MSFD requires development of a 'marine strategy' for each of marine (sub)regions. Updates of these individual stages are undertaken on a 6-year cycle.
- The Directive calls for "an ecosystem-based approach to management": use of 11 descriptors capturing marine biodiversity elements including seabirds



MSFD: Art 17 updates of Art 8 (assessment), 9 (GES) and 10 (targets)

Member States shall <u>review</u>, in a coordinated manner.... the following elements of their marine strategies <u>every six years after their initial establishment</u>:

- a) the initial assessment and the determination of good environmental status, as provided for in Articles 8(1) and 9(1) respectively;
- b) the environmental targets established pursuant to Article 10(1);
- c) the monitoring programmes established pursuant to Article 11(1);
- d) the programmes of measures established pursuant to Article 13(2).





2017/848 of 17 May 2017D1C1 Primary: The mortality rate per species from incidental by-catch is below levels which threaten the species, such that its long- term viability is ensured.PrimaryD1C2 - The Population Abundance of the species is not adversely affected due to anthropogenic pressures, such that its long-term viability is ensured.PrimaryD1C3 - The population demographic characteristics (e.g. body size or age class structure, sex ratio, fecundity and survival rates) of the species are indicative of a healthy population which is not adversely affected due to anthropogenic pressures.SecondaryD1C4The species distributional range and, where relevant, pattern is in line with prevailing physiographic, geographic and climatic conditions.SecondaryD1C5: The habitat for the species has the necessary extent and condition toSecondary			. A
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Assessment as per criteria in Commission Decision 2017/848:

- MSFD criteria D1C2 and D1C4 equate to the 'population size' and 'breeding distribution map and range size' criteria of the Birds Directive 2009/147/EC;
- The implementation of the MSFD should be based on the primary criteria;
- The use of a secondary criterion is decided by Member States, where necessary, to complement a primary criterion or when, GES is at risk



MSFD: Art 17 updates of Art 8 (assessment), 9 (GES) and 10 (targets)

Knowledge gained/data gathered through LIFE Arcipelagu Garnija Project played an important role in the assessment of the Yelkouan Shearwater.

Survey methodologies applied by the projects:

- Land and boat based surveys
- Thermal Imaging Counts
- Camera Traps
- Sound Recorders
- Capture-Mark-Recapture



MSFD: Art 17 updates of Art 8 (assessment): outcomes for Yelkouan Shearwater

D1C1 (bycatch):

- assessed on the basis of data collected during scientific observer trips and logbook completions by fishermen.
- ✤ <u>Null</u> seabird bycatch recorded for 2013-2019.
- Pilot studies including use of on-board observations and logbooks planned as part of Malta's Work Plan for Data Collection under the EU Common Fisheries Policy seek to improve data collection such that this reflects the real scenario with respect to seabirds' by-catch.



MSFD: Art 17 updates of Art 8 (assessment): outcomes for Yelkouan Shearwater

D1C2 (population abundance):

- The total population estimate of Yelkouan Shearwater for 2016 to 2018 is <u>1795 to 2635 breeding pairs for the Maltese Islands</u>, in contrast to the 1660 to 1980 breeding pairs reported in the 2013 initial assessment.
- Site specific increases in breeding numbers may reflect the increase in the knowledge, increased monitoring effort and use of new technologies, as well as implementation of conservation measures (e.g. rodent control).
- The population of this species is deemed to be considered as currently stable.



MSFD: Art 17 updates of Art 8 (assessment) - outcomes for Yelkouan Shearwater

D1C3 (demographic characteristics):

- annual adult survival probability across all colonies, calculated on the basis of CMR data, was found to vary between 0.7 and 1 for the 2013-2019 period
- Annual adult survival probability is for all but one year (2018) lower than the regional target (≥ 0.92) emphasizing the need for local long-term conservation actions targeting the species.



MSFD: Art 17 updates of Art 8 (assessment) - outcomes for Yelkouan Shearwater

D1C4 (distributional range):

- Breeding range for Yelkouan Shearwater showing **potential range** (level "1") in red and the **high confidence range** (level "2") in blue, for the period 2016 to 2019
- New breeding sites detected at Fomm ir-Riħ, Miġra il-Ferħa, Ċumnija and Cominotto
- Extensive overlaps with Scopoli's Shearwater breeding range, but low competition for habitat given the differences in preferred nesting habitat and breeding phenology.





MSFD: Art 17 updates of Art. 8 (assessment)

EU 'Guidance for Assessments Under Article 8 of the Marine Strategy Framework Directive' (Walmsley et al. 2017)

Scale: region or subdivisions (Baltic and Black Sea); subregion (NE Atlantic, Mediterranean)





MSFD: Art 17 updates of Art. 8 (assessment)

- Assessment of status for these three species is mainly based on trends and the qualitative assessment of the available data.
- No thresholds have been set for any of the criteria
- Qualitative assessment process follows the EU 'Guidance for Assessments Under Article 8 of the Marine Strategy Framework Directive' (Walmsley et al. 2017) to the extent possible.

Species	D1C1 – by- catch	D1C2 – Population Abundance	D1C3 – Population demographic characteristics	D1C4 – Distributional Range
Reference	No thresholds	No thresholds	No thresholds	No thresholds
Value	set	set	set	set
Methodology	Expert	Trends in	Adult survival	Breeding range
Used	Judgement	population	probability	
		abundance	based on CMR	
P. yelkouan	Good	Stable	Stable	Stable
C. diomedea	Good	Stable/Declining	/	Stable
H. pelagicus	Good	Stable	Stable	Stable



MSFD

Art 17 updates of Art. 9 (GES) & 10 (targets)

Updated GES	 Levels of incidental by-catch of marine reptiles, marine mammals and seabirds do not result in declines in the population abundance of the representative species. The population trend in terms of the abundance of breeding seabirds, measured in breeding pairs over a 12-year time period, is stable and not decreasing, taking into consideration natural variation. Breeding success and survival rates, as relevant for breeding seabirds, are not deviating from normal The breeding distribution of seabird populations shows stable or increasing trends over a twelve year period.
Updated Targets	 Number of Incidentally caught specimens, as verified through official data collection processes and analysis of stranded specimens, shows a declining trend. The proportion of breeding seabird population and distribution, that is subject to disturbance as a result of light pollution, rat predation and other anthropogenic activities is reduced.



Legal tools for the management of threats and pressures

- The MSFD Programme of Measures (PoMs) pursuant to Article 13 of the Marine Strategy Framework Directive (2008/56/EC) covers **both existing and new measures** that would contribute to the achievement of GES for each MSFD Descriptor, **including Seabirds**. Adopted in 2017.
- Protected areas as per Habitats Directive (92/43/EEC) subject to:
 Conservation Objectives (COs) which aim to maintain or improve
 Conservation Status (CS) of the protected features; and
- Conservation Measures (CMs) these being are concrete actions to be taken to reach/ensure COs. Drafting at final stages.
 - Obligation under Article 6.1: "For special areas of conservation, Member States shall establish the necessary conservation measures involving if need be, appropriate management plans specifically designed for the sites or integrated into other development plans and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the site."



Legal tools for the management of threats and pressures

- Article 4.1 and 4.2 of the Birds Directive, oblige Member States to take a similar approach when it comes to the management of SPAs.
- Further ERA may resort to Species Protection Notices/Conservation Orders



Legal tools for the management of threats and pressures

- Threats and Pressure targeted by PoMs and CMs include:
 - Disturbance issues (noise, light and littering) in recreational areas
 - Light and noise pressures driven by both land-based and sea-based activities
 - Interaction with fishing by-catch
 - Rat predation
- MSFD PoMs include awareness/educational campaigns targeting disturbance issues, the preparation of guidance documents to manage noise and light pressures and knowledge improvement on by-catch issues.
- Upcoming PoMs updates and proposals of CMs/COs for SPAs/MPAs will consider the proposed actions under the LIFE Arcipelagu Garnija Project in order to mitigate and manage the identified pressures on seabirds



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