Pierre Yésou, ornithologist (retired)



Le Croisic: where the history began

late 19th – early 20th centuries: specimens collected near Le Croisic for the Museum of Natural History in Nantes (Dr Louis Bureau, 1847-1936)

late 1920-1930s: Noël Mayaud (1899-1989) came to Le Croisic and met both Louis Bureau and the shearwaters → description of the species moult + its status in France

the southern coast of Brittany then was the only place where Balearic Shearwaters were known to occur in large numbers, June – September.

Alauda 3 (1931) : 230-249, errata 457. *Bull. SSNOF*, 5ème série, VIII (1938) : 56-86



1950s - 1970s

development of field ornithology and birdwatching no regular survey however various sources indicate:

- → 1,000+ off Vendée and in Mor Braz (sardine fisheries)
- \rightarrow x100 at the tip of Brittany (until the sardine fishery collapsed)
- → regular occurrence north to western Channel (much lower numbers)
- \rightarrow rare but regular winter records, a few individuals



1980s

- ship-based line transects at sea (Georges Hémery, MNHN)
- land-based censuses of coastal rafts, mostly off Vendée
- → estimate: 8,000 10,000 ind. summering in Biscay mostly from Vendée to south Brittany ("Mor Braz")
- \rightarrow calendar as described in the 1930s (June September)
- \rightarrow links between birds distribution and:
 - nutrient-rich cold water fronts (satellite imagery, G. Hémery)
 - fisheries (with Patrick Le Mao, IFREMER)

Rev. Ecol. (Terre Vie) 69 (2014) : 356-359 Mediterranean Marine Avifauna, NATO ASI Series G 12 (1986): 513-517 Status and Conservation of Seabirds, 1989 (1993): 135-145, SEO



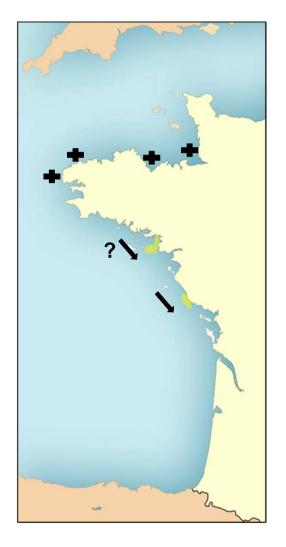
1990s

Life Project *Pardela Balear* (SEO-BirdLife Spain) invited to update the species status in France

Search for data (birdwatching societies) + protocoled surveys in Vendée and Mor Braz

- → far less birds in Vendée (fishery failure)
- → much fewer birds found in Mor Braz (overlooked offshore?)
- → increasing abundance (>1,000) in western Channel
- → overall ca.3,000 birds lacking (partly overlooked?)
- → first suggestion that the core of the distribution was moving north as an effect of global warming

Scientia Marina 67 (2003): 143-148 La Pardela Balear (2004), SEO-BirdLife Spain



21st century (1): citizen science + international co-operation

- coordinated survey from Normandy south to Vendée involving birdwatchers and nature conservation societies (2009-2012, with Laurent Thébault)
- Interreg project FAME (2010-2012, RSPB & partners)
- joint studies with British researchers (Russel Wynn & coll.)
- \rightarrow 8,000+ ind. *i.e.* numbers similar to 1980s
- → incl. 4,000+ birds together at various sites on 6 occasions since 2010 record of 6,400 ind. / Mor Braz, 7th August 2020
- → birds arrive earlier (April-May) and depart later (October-November)
- \rightarrow overwintering: 700-1,000 / January 2008, then 800-925 / January 2012

Ornithos 16 (2019) : 209-213 Ornithos 20 (2013) : 206-209 Ornithos 28 (2021) : 140-143

21st century (2): international scientific cooperation

- → confirmation that land-based observations reflect the species main distribution
- → confirmation of the northward trend in distribution (up to N France and SW England)
- → confirmation that change in distribution is linked to global warming through changes in fish distribution and induced changes in fisheries

Endangered Species Research 25 (2014): 1-18 British Birds 100 (2007): 392–406 Biology Letters 3 (2007): 529-532 & 7 (2011): 702-705

21st century (3): calls to Balearic Shearwater conservation

2004: Critically Endangered at global scale (IUCN)

- French waters obviously host a significant part (>25%) of the global population
- this part is increasing (rather stable numbers while the global population is decreasing)
- birds have to undertake longer migrations \rightarrow more energy needed
- birds are facing more risks (fish stock depletion / interactions with fisheries / habitat modifications)

2006: formal call for the species conservation in France (La Sorbonne University, Paris)

- Interreg project FAME (2010-2012) was an answer to this call, although inconclusive

2011: International Species Action Plan / European Commission

2012: the species is included as an ACAP species

Alauda 75 (2007) : 287-289 ACAP (2012) http://www.acap.aq 2011. International species action plan (2011), SEO/BirdLife & BirdLife International.

Then...

Photo JL Dourin