



# **Annual Report 2022**





# Statement from the Board

Organisations, like species, must evolve to survive. Their evolution gives them unique capabilities which they must use to stay alive, grow and thrive. For whales and dolphins, the sophistication of their communications with one another gives them an edge over other species. For IWDG, it is the organisation's scientific credentials, and its capacity for evidence-based analysis, that give it the ability to be heard above all the human voices competing for use of the seas that surround our island.

IWDG's vision is: "We will lead evidence-based cetacean conservation for Ireland". We will do so by embodying our values of science-based advocacy, engagement and visibility. We have set a goal that, by 2040, we will achieve healthy populations of cetaceans in a thriving ecosystem and healthy seas, in synergy with Ireland's coastal communities.

To take us towards our goal, IWDG's Board, its officers and members have agreed a strategy based on five action lines:

- IWDG will increase stakeholder engagement. This means we will broaden our dialogue with fishers, ports, shipping companies, the energy sector, coastal communities, NGOs and government.
- We will proactively advocate to governments for policy and action. So, we
  will make our voice heard by the Irish and UK governments when decisions
  are made about Marine Protected Areas around this island, as well as at EU
  level. We will also seek to influence the Irish government's policies on
  sustainable marine tourism, deep sea mining and other areas of exploitation
  of our ocean.
- IWDG will generate and interpret new knowledge, including citizen science.
   This will lead to more academic collaboration and result in more international engagement.
- We will bring public opinion with us. To do this, we must grow our membership and engage more with young people through our outreach programmes. We will drive discussions in the media, social media and through podcasts.
- Lastly, IWDG needs to build a sustainable funding model to enable it to undertake all of these activities. We will maintain and grow the current

sources of income but also need to learn from other charities about their approaches to fund-raising.

I am delighted to have the opportunity to be Chair of the IWDG at such an important time in the evolution of this organisation. We have big challenges ahead of us but we have the resources to address them. Above all, we have all of the skills, knowledge, enthusiasm and energy of our magnificent team in Kilrush, led by our CEO, Dr Simon Berrow. Then there are the officers and local groups, based all over Ireland, who make such a success out of every aspect of IWDG's activities: the sightings and strandings programmes, outreach and social media, courses and membership events, publications and press relations. Every member, young and old, however they interact with IWDG, is an ambassador for whales and dolphins. I thank every one of you for the generosity of your support.

And, of course, there is Celtic Mist. Our wonderful old yacht, donated to us by the Haughy family, will be 50 years old next year. She is of course, IWDG's main research vessels and many thousands of whales and dolphins have been sighted, counted, tracked, recorded and photographed from her deck. My involvement with IWDG came about because of Celtic Mist and each summer I spend several weeks as skipper. For me, there can be little more enjoyable than working with our fantastic marine biologists on week-long expeditions to methodically survey our seas for whale and dolphin activity. And then there is the joy of seeing the reactions of our crew of IWDG members, some of whom have little or no sea-going experience, as we come across a pod of dolphins, a baby basking shark, or a humpback whale. There's an idea, why don't you come with us next year? Or if you prefer to stay on land but would still like to be involved with Celtic Mist, you could join us on a winter weekend 'meitheal' in Kilrush, as we prepare the boat for another season at sea. You will be made very welcome.

I have one last big thank you. Thanks to my fellow Directors. It is a pleasure to be working with you as we help IWDG to grow and thrive.

Dr Patrick
Chair of the Board of Directors



# Statement from the CEO

We had another great year in 2022. Busy on all fronts, with increasing strandings and sightings driven partially by the roll out of our new reporting app; Celtic Mist back to a full schedule after restricted sailings over the last few years; local groups expanding across the country and a greater social and public media presence.

This is important. We are facing unprecedented times. Biodiversity and Climate crisis are growing, not diminishing, with unpredictable impacts on our seas. Pressures inshore with offshore renewables, port developments and coastal defences increasing. Obligations to identify, designate and manage Marine Protected Areas under EU law are building too. How do we get this right? Ensure economic progress without degrading our marine waters, indeed while restoring our marine waters, protecting fish stocks, enhancing our marine habitats?

The IWDG is an evidence-based organisation and we hold nationally important datasets which we use to inform and influence planning and decision-making. It is through our citizen science networks, strong and growing membership and credibility that we are most effective. Never has our work, and those of other eNGOs in Ireland been more important.

Thank you for your continued support, thank you to our dedicated volunteers who visit strandings, report sightings and carry out effort watches. Thank you to our board for guidance and taking responsibility for governance and thank you to our officers in all parts of the island of Ireland who carry out the work of the IWDG. We appreciate you all and our success is built entirely on your hard work.

Dr. Simon Berrow

**Chief Executive Officer** 



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# 2022 HIGHLIGHTS

- IWDG continued to support the All-Ireland Cetacean Stranding and Sighting Schemes to collect and validate data on whales, dolphins and porpoises. We validated 2,414 sightings and 303 strandings of whales, dolphins, porpoises and basking sharks during 2022. These data are used to identify trends and unusual events and support development of conservation actions and policies. They are also provided to third-level institutes to add value through more detailed analysis.
- The group continued to celebrate their **30 years** anniversary making this a focus of **Whale Tales 2022** with the theme being '20 years of Biological Recording'.
- **Celtic Mist:** Day sails and Skipper training from Poolbeg. Floating Classroom took place from Dublin to Derry with 12 weeks of cruises and 2 weeks of research surveys from Kilrush.
- Fair Seas Campaign publish report The Irish Whale and Dolphin Group are
  project partners with fellow Irish eNGOs in this new marine protected area
  campaign. We published our first report; Revitalising Our Seas, Identifying Areas
  of Interest for Marine Protected Area Designation in Irish Waters. The report uses
  a suite of datasets to identify potential MPAs and shows how Ireland can achieve
  its goal of protecting 30% of our seas by 2030.
- New Science Officer appointed: Rebecca Dudley, is IWDG's newly appointed Science Officer. She previously worked at the Hebridean Whale and Dolphin Trust where she managed and delivered their visual and acoustic marine mammal monitoring programme onboard their research vessel Silurian. She holds an MRes in Applied Marine Science from the University of Plymouth, with her research using citizen science data to assess the residency of bottlenose dolphins in southwest England. She has also worked as a naturalist in marine mammal hotspots around the world and assisted on conservation and research projects in North America.
- New Celtic Mist Officer, Andrew Shine takes on the role of managing the Celtic Mist Summer schedule amongst other tasks including a key member of our IWDG Consultancy team.

#### Research:

• Whale Track Ireland: During 2022 the IWDG's Whale Track Ireland project monitored returning and new humpback whales in Irish coastal waters using Photo Identification from a range of both dedicated and opportunistic platforms. During the year we documented 21 individuals of which 17 had been previously recorded and 4 were new animals never previously recorded, which were added to the Irish Humpback Whale Photo ID catalogue, bringing the total number of recognisable humpback whales in Irish waters to 120 individuals. In November we started to rebuild the Irish Fin whale Photo Identification catalogue on a Google Drive platform for ease of sharing, which is a work in progress, but at time of writing this resource recognises 53 uniquely marked individuals. Both these catalogues are shared with research partners across the North Atlantic.

- Shannon Dolphin Project: IWDG continued to support the long-term monitoring of the bottlenose dolphins in the Shannon Estuary. There is great demand for our data and knowledge following the planned expansion of economic development in the estuary.
- An increase in strandings of deep diving species prompted a pilot post-mortem scheme DDRIP (Deep Diving and Rare Species Investigation Programme) with partial support from the National Parks and Wildlife Service.
- New Species to Ireland: a Dwarf Sperm Whale was live stranded and died in Glengarriff in May. On recovery for post-mortem it was confirmed as a new species. The whale was fully examined and the skeleton recovered for preparation for the NMI (Natural History) Museum in Dublin.
- **Education and Outreach**: The IWDG continues to develop a nationwide approach to Education & Outreach with a dedicated Outreach officer who delivers workshops to schools and training to local groups.
- Local Groups: IWDG have established one more local group in Wicklow making 12 Local groups throughout the country. Our E&O officer continues to provide online support and training to all local groups enabling and empowering them to take an active part in the work of the IWDG.
- IWDG Transition Year Work Experience Programme: The E&O officer facilitated
  4 transition year students to complete their work experience in Kilrush, providing
  them with a variety of experience in marine science.

#### Events Training Courses and talks:

- Species Identification and Live Stranding training courses were delivered nationwide to Stranding Network members and IWDG Local Groups.
- National Biodiversity Week: A series of land-based, guided whale watches were held on Saturday 21st May.
- Weekend whale watching and identification courses at CECAS centre, Leap, Co. Cork.

- o Heritage week
  - National Whale Watch Day
  - Let's Talk Blubber with Sibéal Regan
  - Dolphin Scavenger Hunt, Kilrush, Co. Clare

#### • Communication & Membership

- A digital marketing strategy delivered regular weekly social media posts, driving traffic to the IWDG website, encouraging people to support or join the group.
- Group membership has plateaued this year with a small increase of just 15 extra renewals, 865 in total. But support has been shown in other ways with more people purchasing merchandise from the shop and adopting whales and dolphins.
- The Adopt a Whale and Dolphin program was promoted and grown with many more supporters choosing to support individual animals as a means to help with conservation efforts. There were 78 adoptions of Whales and 37 of Dolphins.
- A summer edition of the IWDG magazine Flukes was produced, printed and sent to all IWDG members and to people outside the IWDG to promote our work
- A Think In weekend for all IWDG officers and the board was held to look at our long term vision. IWDG Board develop a new Strategy (2023-2028) to prioritise our resources and ambition.

## Advocacy and Submissions:

- Multiple submissions on key policies related to cetaceans were made including a submission on the Maritime Area Planning Bill in conjunction with other IEN members and a contribution to the Joint Oireachtas Committee on Climate Action.
- Offshore Renewables dominate the landscape with IWDG continuing to be represented on the OREDPII and MSP stakeholder groups and the National Biodiversity Forum
- IWDG review of Deep Sea Mining was published to inform the debate on whether this extractive industry should be licensed in Ireland and elsewhere.
- The launch of the Fair Seas Revitalising Our Sea Report was a huge collaboration between the IWDG, BirdWatch Ireland and the Irish Wildlife Trust and identified 16 Areas of Interest to be considered as potential MPAs.

C	)	IWDG continued to comment on major infrastructure planning, ensuring impacts on cetaceans and their habitats are fully considered.

# **ABOUT THE IWDG**



Strategy 'think-in' weekend, Clare

#### **HISTORY**

The Irish Whale and Dolphin Group (IWDG) was founded in 1990 to establish an Irish stranding and sighting scheme and to campaign for the declaration of Irish territorial waters as a whale and dolphin sanctuary. Just six months later, in June 1991, the Irish Government declared all Irish waters to be a whale and dolphin sanctuary – the first of its kind in Europe. The IWDG is a broad mix of conservationists, whale watchers, researchers, educators and, above all, people who are passionate about marine wildlife and cetaceans in particular.

#### **MISSION**

The Irish Whale and Dolphin Group (IWDG) is dedicated to the conservation and better understanding of Irish cetaceans (whales, dolphins, and porpoises) and their habitats through research, study, education and interpretation.

Our focus is to promote better understanding of Irish cetaceans and their habitats through education and research. We achieve this through a number of activities:

- We collect information and disseminate it through our website (www.iwdg.ie), publications, literature and media to support conservation initiatives in Ireland.
- 2. We collaborate with universities, government agencies and other research groups in research into cetaceans and their habitats in Ireland and abroad.
- 3. We work towards making the Irish Whale and Dolphin Sanctuary effective in the conservation of all cetaceans that either live in, or migrate through Irish waters.
- 4. We work side by side with industry, fishers and other groups whose interests may sometimes conflict with those of cetacean conservation, to solve problems to the benefit of both humans and cetaceans.
- 5. We highlight the fact that Ireland is one of the best locations in the North Atlantic to see cetaceans and to stress the need to conserve them for future generations.
- 6. We promote best practice in welfare, marine tourism and whale watching in Ireland.
- 7. The IWDG publishes and reviews annually a three-year plan following consultation with members.

#### **GOVERNANCE**

The IWDG is a registered charity (Charity Number: CHY 11163) and registered with the Charities Regulator (RCN 20029913). The IWDG is governed by a voluntary board of Directors composed of members to ensure good gender balance and diversity of skills to assist in areas such as governance, research, education and development. The IWDG is an employer with three full-time employees, eight service providers and six volunteer officers assisting us to deliver our work. During 2022, ten external consultants assisted us in our consultancy work. The CEO is responsible for the day to day running of the IWDG while the board is developing a longer-term, more strategic view of the IWDG and continues to provide oversight on corporate governance and finance.

## **IWDG DIRECTORS**



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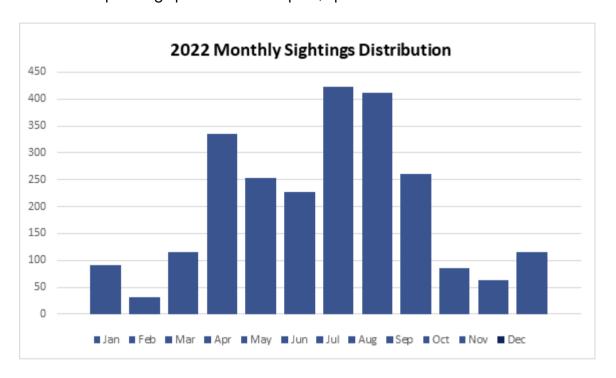
Andrew Shine Celtic Mist Officer



Gemma O'Connor Live Stranding Network Coordinator.

## **IWDG SIGHTINGS REVIEW**

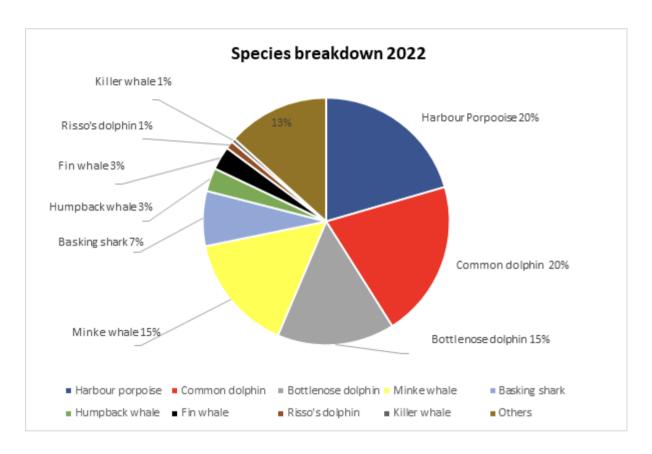
During 2022, the IWDG validated 2,414 cetacean and basking shark sighting records, combining both casual and effort related sightings. This is the second highest number of sightings handled by IWDG since the group was established in 1990 and represents an 8% decrease on 2021. During this period 331 land-based effort watches were carried out from headlands throughout the four provinces. As with previous years, most cetacean sightings reported are mainly from inshore waters of 1–20km but a small number were from places like the Porcupine Seabight, Celtic Deep and offshore off the west coast, which increases the species diversity to include deep diving species such as pilot, sperm and beaked whales.



In order of frequency of sighting records, the 10 most commonly seen species were:

- 1. Harbour porpoise x 493 (20%)
- 2. Common dolphin x 480 (20%)
- 3. Bottlenose dolphin x 370 (15%)
- 4. Minke whale x 365 (15%)
- 5. Basking shark x 168 (7%)
- 6. Humpback whale x 84 (3%)

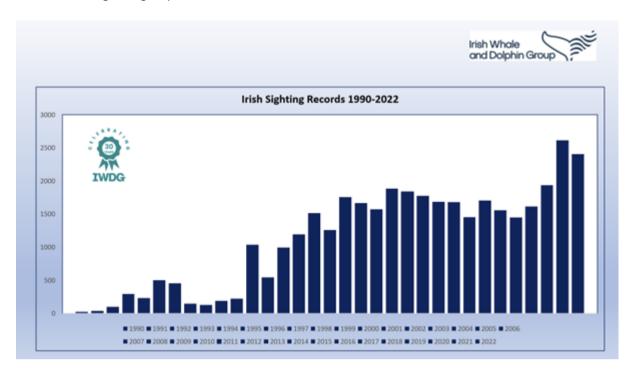
- 7. Fin whale x 82 (3%)
- 8. Risso's dolphin x 35 (1%)
- 9. Killer whale x 7 (0.5%)
- 10. Pilot whale x5 (0.1%)



# Sighting summary 2022

The most frequently observed and reported species was the harbour porpoise, our smallest cetacean species, with 493 records sighting records or 20% of all sightings validated by IWDG in 2022. The common dolphin came in second place with 480 sightings. Bottlenose dolphins took 3rd place with 370 records (15%). Minke whales, our smallest rorqual, were our most frequently reported baleen whale with 365 sightings (16%). The basking shark had another good year with 168 sightings (7%), which was the highest number of sightings since 2011, when we validated 176 records of the planet's second largest fish and shark. Our two large rorqual species, the humpback and fin whale had similar volumes of reporting, with 84 & 82 sightings respectively (both on 3%). Completing the summary of "usual suspects"

were the mysterious Risso's dolphin on 35 sightings and last but not least the killer whale (Orca) with a fairly typical year for the ocean's top predator at seven validated sighting reports.



## Sighting highlights 2022

A remarkable 27% of all harbour porpoise sightings came from Co. Dublin with most coming from Howth Head, from a single observer, whose land based photographic efforts have resulted in the establishment of a Harbour porpoise Photo ID catalogue, which is starting to produce interesting results in terms of documenting resightings of well-marked individuals.



Harbour porpoises, Howth Head, Co. Dublin, © Dave O' Connor

As we've come to expect common dolphins featured strongly in the southwest, with whale watching boats in places like west Cork regularly reporting large groups of 100–400 animals during a standard 3–4 hour trip. But there is some evidence of this species prospecting new areas and one such place is the Shannon Estuary, home to Ireland's only resident population of bottlenose dolphins; where between April and December 2022 common dolphins were recorded on seven occasions in the Inner Estuary. The sighting of a common dolphin super-pod with between 1,000–1,500 animals 5–10 km north of Inistrahull, Co. Donegal on May 1st helps make the case that this species is like so many others venturing further north each year.

Minke whales remain the only whale species that can be seen regularly in all Irish coastal waters and once again there were numerous sightings of singles along the Dublin coast over the summer months. However, as always the really large aggregations are in the southwest, and we reference sightings of C.30 minkes off the Blasket Islands, Co. Kerry on June 6th and the largest count of C. 50 animals in the Deep Hole area of West Cork on April 29th. The later record is noteworthy given how early it was in the season.

Although 2022 was a relatively poor year for sightings of our most charismatic whale, with just 84 validated humpback records, the lowest since 2014 (n=53), the real story was not so much the number of sightings, rather their distribution, as 2022 again suggested Irish humpbacks were spending relatively more time in the west and northwest counties (Galway to Donegal) rather than south and southwest region (Waterford to Kerry). This trend has been confirmed in 2023.



Humpback whale, Deep Hole, West Cork, April 29th 2022 © Maureen Jackson

The data shows no firm evidence of our largest coastal baleen whale, the fin whale following the humpbacks up the west coast as counties Cork and Kerry between them accounted for almost 80% of fin whale sighting records in 2022.

## In Conclusion

Most sightings are submitted to IWDG online or on our free Reporting App, both of which require continuous support in order to keep abreast of the latest software updates and remain relevant. The impact of social media platforms such as Facebook, Twitter(now X) and Instagram on biological recording schemes is of ongoing concern. Up to relatively recently, www.iwdg.ie was really the only platform where people could show others what they were observing. However, now people will post their images or videos on their own platforms, and while a percentage of these will filter down to the IWDG, many presumably do not. Today's image-rich social media environment has however greatly improved our ability to validate records to species level, which has improved from an historic 86.5% to 93.4% in 2022. So, while the Sighting Scheme remains the country's primary repository for validated cetacean sighting records, the state agency responsible for protecting our wildlife and habitats can't assume that the biological recording schemes that underpin so much conservation and research can continue to operate indefinitely without central support. Goodwill, Citizen Science and a considerable voluntary

effort can only take us so far, and a critical review of our sighting scheme remains a priority.

We'd like to take this opportunity to thank all our members for reporting their "casual" sightings to us, and to those effort watchers who put in so much dedicated time in carrying out more systematic watches from local sites. You have our respect and appreciation.

Pádraig Whooley – IWDG Sightings Officer

## **IWDG STRANDINGS REVIEW**

Strandings reported to the IWDG in 2022 (n=303) were down by 31% compared to the highest number on record in 2021 (n=440). The year 2021 had represented an increase of 37.5% from 2020 figures, with a similar increase reported previously from 2019 to 2020 of 36%, although records received in 2019 were uncharacteristically low, down from 14% from 2018 (Fig. 1). Possible explanations for such a dramatic increase in 2021 other than increased mortality include i) more people spending time outdoors due to COVID-19 restrictions and thus finding more animals ii) the ease of recording on the new IWDG mobile phone Reporting Application and iii) the IWDG having an increased presence on social media outlets iiii) an increase in abundance of common dolphins in inshore waters.

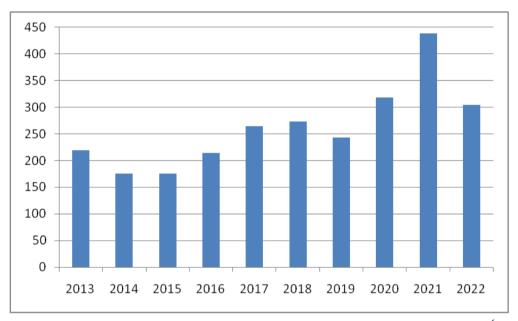


Figure 1. Number of published stranding records over the last ten years (2013-2022).

Fifteen cetacean species were identified in 2022, which was slightly higher compared to previous years: 2021 (n=14), 2020 (n=13), 2019 (n=13) (Fig. 2 & 3). This is primarily due to several rare species washing up, such as the dwarf sperm whale (the first record of this species in Ireland), pygmy sperm whale (of which IWDG had only nine records), Sei whale (of which IWDG had only four records), and a True's beaked whale (of which IWDG had only 15 previous records).

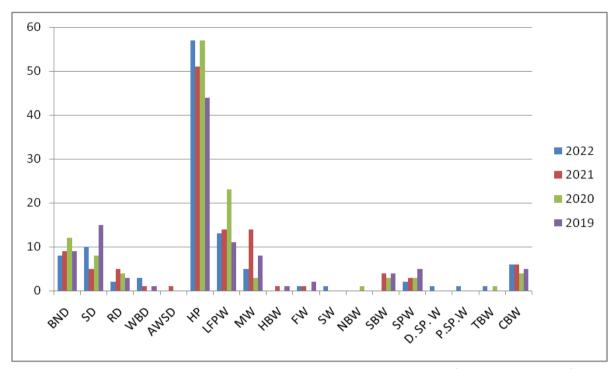


Figure 2. Cetacean species recorded in 2022, 2021, 2020 and 2019. BND (Bottlenose Dolphin), SD (Striped Dolphin), RD (Risso's Dolphin), WBD (White-beaked Dolphin), Atlantic White-Sided Dolphin (AWSD), HP (Harbour Porpoise), LFPW (Long-finned Pilot Whale), MW (Minke Whale), HBW (Humpback Whale), FW (Fin Whale), Sei Whale (SW), NBW (Northern Bottlenose Whale), SBW (Sowerby's Beaked Whale), SPW (Sperm Whale), Dwarf Sperm Whale (D. SP. W), Pygmy Sperm Whale (P.SP.W), TBW (True's Beaked Whale), and CBW (Cuvier's Beaked Whale).

In 2022, the Short-beaked Common Dolphin (n=155) and Harbour Porpoise (n=57) were the most frequently recorded stranded species, accounting for 51% and 19% of all records, respectively. Most of the increase in the total number of strandings can be directly attributed to the Short-beaked Common Dolphin. Records of this species have been increasing consistently since 2011. There was a 62% increase in stranding records for common dolphins in 2021 when compared to 2020 (n=153), though this figure decreased by 37.5% in 2022 (Fig. 3).

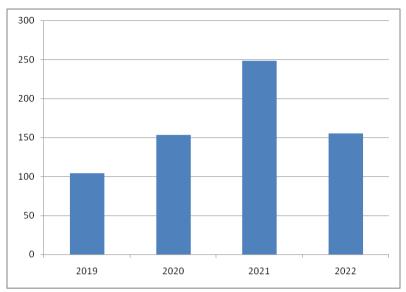


Figure 3. Common Dolphin stranding records from 2019, 2020, 2021 and 2022.

There is recent evidence of an increase in common dolphin abundance in inshore waters to the south of Ireland in the Bay of Biscay (Astarloa et al. 2021 [2]), which has been associated with changes in climate indices and prey biomass. If a similar increase has occurred further north off of the Irish coast, this may in some part explain increased stranding rates as strandings would be expected to increase with increased dolphin abundance.

A recent study using stranding data from the UK Cetacean Stranding Scheme noted an increase in the number of warm water adapted species (Common Dolphins and Striped Dolphins) and a decrease in the number cold water adapted species (White-beaked Dolphins and Atlantic White-sided Dolphins) (Williamson et al. 2021 [3]). When reviewing data from the IWDG Stranding Scheme, we see a similar trend with regards to the increase in the number of Short-beaked Common Dolphins (Figure 4), and a decrease in the number of Atlantic White-sided Dolphins (Figure 5). Williamson et al. (2021) noted that utilising data from stranding schemes has been proposed as a means of monitoring climate change due to the availability of long-term, standardised data sets for analyses.

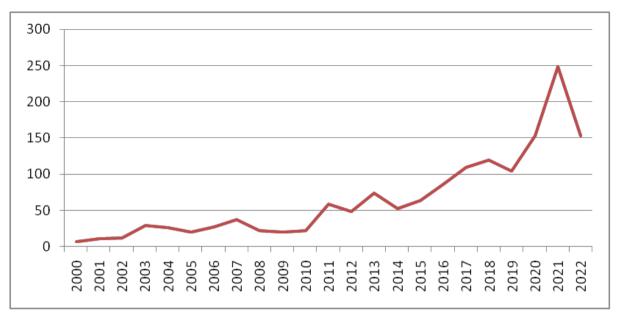


Figure 4. Number of Short-beaked Common Dolphin stranding records received between 2000 and 2022.

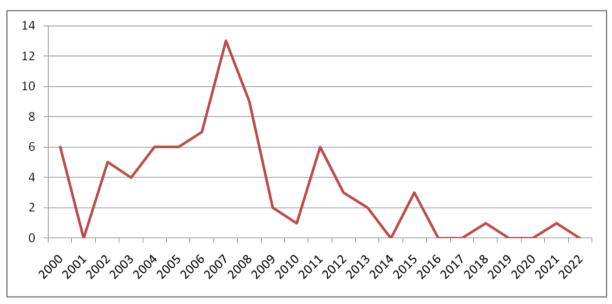


Figure 5. The number of Atlantic White-sided Dolphin stranding records 2000-2022.

As in previous years, Harbour Porpoise were the second most frequently reported species (n=57), up from 51 records in 2021, though slightly down from 58 records in 2020, with 44 records reported in 2019 and 46 in 2018. As with common dolphins, harbour porpoise strandings reveal an upward trend starting in 2011; rising from an average of 28.6 per year between 2000 and 2010, to an average of 44.4 per year between 2011 and 2022, the peak of which was reached in 2020 with 58 harbour porpoises reported.

The number of Minke Whales in 2022 (n=5) dropped by 64% compared to an unexpected peak in 2021 (n=14). Between 2000 and 2007, there was an average of

three minke whale strandings reported per year, which increased to around five per year between 2008 and 2020, a figure which is more in line with the number reported in 2022.

In 2022, the IWDG initiated a pilot post-mortem scheme of rare and deep-diving cetacean species stranded in Ireland with partial support from the National Parks and Wildlife Service. Between April 2022 and April 2023, six animals were collected and examined under this scheme (Deep Diving and Rare species Investigation Programme; DDRIP): one white-beaked dolphin from Co. Mayo, one pygmy sperm whale from Co. Donegal, one dwarf sperm whale from Co. Cork, one True's beaked whale from Co. Kerry, one Cuvier's beaked whale also from Co. Kerry, and one Sowerby's beaked whale from Co. Mayo (the Sowerby's and Cuvier's were reported in 2023).

On 1 May 2022, a live stranded 'small whale' was reported from Glengarriff, Co. Cork. The animal was reported dead the following day and recovered under DDRIP. A skin sample sent to the School of Biological, Earth and Environmental Sciences in University College, Cork confirmed that the animal was a dwarf sperm whale. This was the first record of this animal in Ireland, alive or dead.

There were a total of 28 live stranding events reported in 2022, comprising eight species (bottlenose dolphin, common dolphin, dwarf sperm whale, harbour porpoise, pygmy sperm whale, Risso's dolphin, striped dolphin and white-beaked dolphin) which represented a decrease of 45% compared to 2021. Five events were classed as mass strandings, which are defined as "two or more cetaceans (excluding cow/calf pairs) stranding at the same time and place". Ten mass strandings were recorded in 2021, compared to 11 in 2020, three in 2019, six in 2018, and seven in 2017. The mass stranding events in 2022 were all of common dolphins, and were comprised of three groups of two, one group of three, and one group of 26 - the largest mass stranding event of common dolphins ever recorded by the IWDG Stranding Scheme. This event occurred in Tarmon, Co. Mayo on the 26th of October. The majority of the animals were refloated and did not re-strand locally, with only two confirmed dead (Figure 6).



Figure 6. Mass stranding of 26 Short-beaked Common Dolphins at Tarmon, Co. Mayo on 26 October 2022. Photo by Gemma O'Connor, IWDG Live Stranding Network Coordinator.

Stephanie Levesque – IWDG Stranding Officer

[2]Astarloa, A., Louzao, M., Andrade, J., Babey, L., Berrow, S., Boisseau, O., Brereton, T., Dorémus, G., Evans, P.G., Hodgins, N.K. and Lewis, M. (2021) The Role of Climate, Oceanography, and Prey in Driving Decadal Spatio-Temporal Patterns of a Highly Mobile Top Predator. Frontiers in Marine Science 8: 1-16.DOI: 10.3389/fmars.2021.665474

[3] Williamson, M.J., Doeschate, M.T., Deaville, R., Brownlow, A.C. and Taylor, N.L. (2021) Cetaceans as sentinels for informing climate change policy in UK waters. Marine Policy 131: 104634.

# **RESEARCH**

Research is of fundamental importance to the IWDG, in order to increase our understanding of the ecology of cetaceans in Ireland and the importance of Irish waters and to identify and assess threats and pressures. The IWDG believes that good conservation is supported by a strong scientific basis and best practice. To this aim, we encourage, carry out, and support research and monitoring of cetaceans in Ireland. IWDG also provide data to individuals and institutions to build relationships and get more value out of our datasets.

## Collaborations with Third-level Institutes

IWDG have supported three PhD students in Ireland and the UK and four BSc Honors students in Ireland and the UK by providing data for their projects. This is an excellent opportunity to get more value from IWDG datasets and may reveal interesting findings that we are not aware of. Two of these masters projects were published. The IWDG continues to directly support two PhD students in the Atlantic Technological University including Moira Schlingermann, who is exploring legacy and emerging persistent pollutants, and Miguel Blásquez Hervás who is working on humpback whales in Irish waters, including mining the IWDG 20 year dataset. Three requests for our data were from higher level institutions including the Marine Institute and CEDaR in Northern Ireland, demonstrating the value organisations see in our data.

#### **EU OCEAN**

Following the success of the IWDG Reporting App we were invited to participate in an EU Horizon



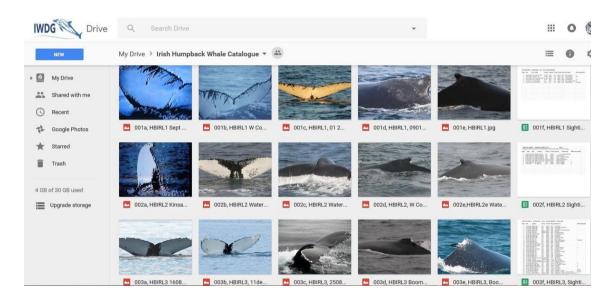
2020 project. The aims of OCEAN is to enhance operator awareness in navigation, to reduce the frequency of severe accidents like collision and grounding, to preserve the life of marine mammals, and to mitigate the risk presented by floating obstacles. IWDG are one of 14 partners led by the University of Western Norway and we have been asked to create an App for all mariners to report potential collisions risk. . Please visit <a href="https://www.ocean-navigation-awareness.eu">www.ocean-navigation-awareness.eu</a>

## **Data Requests**

IWDG received thirteen formal data requests during 2022 most of which were supported. Requests of a commercial nature are reviewed to determine the benefits to cetacean conservation and IWDG may charge for accessing these data. Funds are used to support our Sighting Schemes. All papers published by the IWDG and others that may be of interest are available to members on the IWDG Members Pages at (https://iwdg.ie/members/publications/).

#### Whale Track Ireland

Under this project the IWDG network of members, researchers, boat operators and Citizen Scientists documented sightings of large whale species, namely humpback and fin whales along the south, southwest and increasingly along the west coast, with supporting photo identification images.

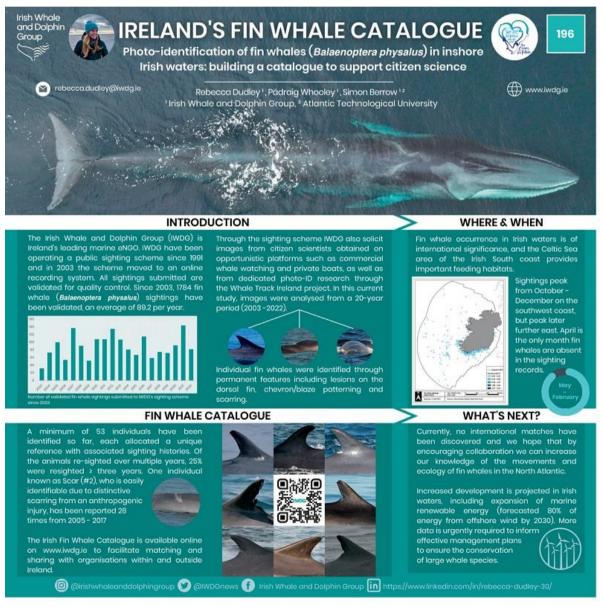


During 2022 the IWDG's Whale Track Ireland project monitored returning and new humpback whales in Irish coastal waters using Photo Identification from a range of both dedicated and opportunistic platforms. During the year we documented 21 individuals of which 17 had been previously recorded and 4 were new animals never previously recorded, which were added to the Irish Humpback Whale Photo ID catalogue, bringing the total number of recognisable humpback whales in Irish waters to 120 individuals.

## Fin Whale Photo-ID Catalogue

In November 2022 we started to rebuild the Irish Fin whale Photo Identification catalogue on Google Drive, which is a work in progress, but at time of writing this resource recognises 53 uniquely marked individual fin whales within Irish coastal waters. As with our humpback ID catalogue, this resource is shared with research partners across the North Atlantic. This work was presented by IWDG Science Officer, Rebecca Dudley, as a poster at the 34th annual European Cetacean Society conference in Galicia, Spain April 2023. (see below). One of the main objectives is to establish their breeding grounds and to see where they are travelling to when outside

Irish waters.



## Bottlenose Dolphin Photo-ID Catalogue

The IWDG continued to collect and collate database images from bottlenose dolphins from around the Irish coast. Most sightings of bottlenose dolphins are off the north coasts from Donegal to Antrim. We work closely with colleagues in DAERA in Northern Ireland to share images of these dolphins to track their movements.

## Shannon Dolphin Project





- IWDG continued to support the Shannon Dolphin Project with funding support from Inis, who supported Mags Daly's position as Shannon Dolphin Project Officer from May 2022.
- 2022 saw the return of our internship programme with six interns from five different countries joining us at the Shannon Dolphin Centre in Kilrush. The visitor centre also reopened for the first time in three years.
- We collected more data in 2022 than in any year since the project began, with over 170,000 images taken. We completed 64 tour boat trips on Dolphin Discovery out of Kilrush and three weeks of dedicated dolphin surveys on Celtic Mist. A total of 13 watches were carried out from Loop Head.
- The IWDG was also successful in winning the tender for the NPWS surveys of bottlenose dolphins in the Lower Shannon SAC.
- Consulting work for ESB, GDG and NFE in the Shannon Estuary also augmented the amount of data we were able to collect.
- A total of 163 individual dolphins were matched from the images collected, including 11 new calves and added to the catalogue. A RIB survey from Doonbeg resulted in matches of animals not seen since 2017. We were also able to

- successfully match 8 out of the 9 calves born in 2021. Only 3 out of 26 calves added to the catalogue since 2019 were not matched this year.
- There were also several matches of Shannon Dolphins outside their known home range. Two females from the inner estuary sub-group, Astral (244) and Belle (880) were matched to animals sighted with the solitary animal, Nimmo, off Galway City. Kevin Costner (008) and Guido (095) were matched to images received from the Clyde on the East Coast of Scotland.

## Ferry Surveys Programme

The IWDG Ferry Surveys Programme monitors cetaceans on the Irish Sea from Rosslare to Pembroke and Dublin to Holyhead with Irish Ferries, and from Belfast to Cairnryan with Stenaline. Monthly surveys are conducted on each route. The surveys were suspended throughout 2021 due to the Covid19 pandemic. On 14th May 2022 surveys resumed on the Dublin - Holyhead route with Irish Ferries. Surveys on the Pembroke route remained suspended due to issues gaining permission for access to the bridge of the survey vessel, and surveys on the Belfast route also remained suspended.

# Ship Surveys Programme

During 2022 the IWDG was contracted by the Marine Institute to supply marine mammal observers on the WESPAS and Celtic Sea Herring Survey, with data used by the National Parks and Wildlife Service. The survey was conducted on board RV Celtic Explorer and RV Tom Crean and cruise reports submitted to the MI.

# Deep Diving and Rare Species Investigation Programme (DDRIP)

There has been a well-documented increase in recent years in cetacean stranding records along the Irish coast. These figures include rare and deep diving species, particularly individual Sowerby's and Cuvier's beaked whales, both live strandings and dead. Mass strandings of deep diving species, which have been considered Unusual Mortality Events (UME), have also

increased, the cause(s) of which remain unknown. This rise in stranding records has led to an increased awareness of these animals, especially beaked whales (family Ziiphidae), and the potential offshore pressures they are experiencing.

These increasing stranding numbers have raised concerns, including amongst the scientific community, with regards to the effects of acoustic trauma, typically associated with offshore military exercises, which have previously been linked to UME's[1]. Rising stranding rates are increasingly becoming a conservation issue due to the small population abundance estimates for beaked whales in the Northeast Atlantic. Estimates of Cuvier's beaked whale abundance from visual surveys suggested around 2,286 Cuvier's occurred in an area of three million km² of the NE Atlantic (Rogan et al. 2017). Estimates for Sowerby's beaked whales were higher at 3,518 individuals (Rogan et al. 2017). Although this is likely to be an underestimate as beaked whales are quite difficult to see, it demonstrates that they are not an abundant species.

Ireland's offshore waters along the western seaboard represent important habitats for beaked whales (Berrow et al. 2018; Kowarski et al. 2019). Thus, Ireland has an international responsibility to provide full protection to these species and their habitats. All cetacean species are listed on Annex IV of the EU Habitats Directive entitling them to strict protection. When a fresh carcass of a species of interest washes ashore, a cause of death should be investigated wherever possible. Although the cause of death may be difficult to establish even after a full post-mortem examination, we can still gain valuable information on the animal's ecology, anatomy and life history, thereby contributing to our extremely limited global knowledge of these elusive animals.

[1]https://www.ascobans.org/sites/default/files/document/ascobans\_ac26\_doc4 .3\_iwg-beaked-whales-report.pdf

In 2022, the IWDG initiated a pilot post-mortem scheme of rare and deep-diving cetacean species stranded in Ireland. Between April 2022 and April 2023, six animals were collected and examined under this scheme (Deep Diving and Rare species Investigation Programme; DDRIP): one white-beaked dolphin from Co. Mayo, one pygmy sperm whale from Co. Donegal, one dwarf sperm whale from Co. Cork, one True's beaked whale from Co. Kerry, one Cuvier's beaked whale also from Co. Kerry, and one Sowerby's beaked whale from Co. Mayo (the Sowerby's and Cuvier's were reported in 2023). Cause of death was established for all six animals, and samples collected under the project have already been sent out to support various ongoing research projects.

# **CONSERVATION WORK**

Irish cetaceans continue to face a range of pressures and conservation threats ranging from overfishing and habitat destruction, to bycatch and noise pollution. Of particular note in 2022 was the ongoing focus on the development of offshore wind in Ireland's marine area. This represents both a threat and potential opportunity for cetacean conservation, with impacts including noise pollution during site surveys, installation and operation of turbines but some opportunities too of marrying biodiversity enhancement with offshore installation development, if done correctly. An ongoing challenge is presented by the chaotic nature of the licensing process, with a developer-lead focus, lack of regulation and lack of a plan for implementing the largest tranche of offshore development in Ireland's history.

A continuing challenge for the IWDG is our lack of resources and capacity to respond to seemingly endless consultations from both the State and from developers. While we have done our best to prioritise our responses with our limited resources, we could do so much more with additional funding.

The relatively new threat of military activity, and especially of the use of military sonar, in Irish waters reared its head in 2022. IWDG has flagged this issue for some time now, as military sonar has been linked to mass mortality events in deep diving beaked whales, with possible population level impacts. IWDG will continue to monitor the impacts of such events through our Stranding programme but has also called on the Irish government to implement acoustic monitoring of the levels of use of military sonar in the Irish EEZ, and to act to deter its use within the Irish Whale and Dolphin Sanctuary.

Marine Protected Areas (MPAs) and Marine Spatial Planning (MSP) are crucial tools for the management of conservation threats to Irish cetaceans. While IWDG welcomes progress on MPAs and MSP in 2022, we need to see faster progress on a functioning Marine Spatial Plan, with adequate zonation of activities and use of international best practice for Irish waters, and an effective and expanded network of MPAs with ambitious conservation goals, and effective enforcement and monitoring. Both are needed as soon as possible to ensure that Ireland has the tools to manage building pressures on cetaceans in our offshore and coastal waters.

#### Offshore Windfarms

2022 saw further calls for IWDG to make submissions on consultations relating to the development of Offshore Windfarms, and high demand from wind farm developers for consultation on proposed developments. As in 2001, the demands for consultation outstipped IWDG's capacity to respond, and the following consultations were prioritised for response:.

- Submission on the Offshore Renewable Energy: Maritime Area Consent (MAC) Assessment for Phase One Projects.
- IWDG Submission on the Offshore Wind Phase Two Consultation.
- Submission to the Department of the Environment, Climate, and Communications consultation to identify the key reforms and investments to accelerate the roll-out of renewable energy in Ireland by 2030, as part of the European Commission's REPowerEU plan.
- Transboundary Environmental Public Consultation Awel y Môr Offshore Windfarm, off the coast of North Wales.

## Offshore Renewable Energy Development Plan

IWDG were represented in this ongoing stakeholder group. Regular meetings were held online during 2022 where the Department shared their progress and timelines for developing the offshore support structures including planning and establishment of the Maritime Area Regulatory Authority (MARA).

#### Marine Protected Areas for Cetaceans

The IWDG are partners in Fair Seas (www.fairseas.ie), a coalition of Ireland's leading environmental non-governmental organisations (eNGOs) and environmental networks. Fair Seas is advocating our government meet their stated obligation to designate 30% of Ireland's ocean territory to be fully protected by 2030. This represents our greatest chance at restoring ocean health and we must act now. Fair Seas' aim is to see Ireland, with a renewed appreciation of the ocean, become a world leader in marine protection, giving our marine species, habitats and coastal communities the opportunity to thrive.

A major publication *Revitalising Our Seas* was published in June and combined cetacean data from the IWDG with bird data sourced by BirdWatch Ireland and fish and benthic data sourced by the Irish Wildlife Trust. It was a huge mapping exercise

and resulted in the identification of 16 areas of interest (AoI) of which all included cetaceans as features of interest.

In July the IWDG made a submission to the Public Consultation on Expanding Ireland's MPA network. The IWDG submission flagged the poor state of Ireland's existing and miniscule MPA network, with most sites having no management plans and no management. The IWDG called for a minimum of 30% of Ireland's Sea areas to be designated as MPAs and the majority of new MPAs should be highly protected, following IUCN Guidelines that the main goal or outcome of new MPAs must be to conserve nature and must exclude unsustainable extractive activities.

The IWDG also called for 'a strong and coherent management plan, with robust measures leading to the protection of existing biodiversity and ambitious biodiversity and habitat restoration goals for each new MPA'. The IWDG also urged that legislation required for designation of MPAs should be prioritised and a national MPA coordinating body and stakeholder group, should be established. We also highlighted that the MPA designation process needs to be sped up to catch up with the NMPF process and the designation of offshore licences for offshore wind farms. Finally, the IWDG stated that the MPA designation process and objectives must be strongly linked to habitat and fish stock recovery to the benefit of ocean ecosystem services, including Ireland's fisheries.

## Marine Spatial Planning

The Conservation Officer continued to represent IWDG on the Marine Spatial Plan Advisory Group established by the Department of Housing, Planning and Local Government and chaired by the Minister for Department of Housing, Local Government and Heritage in 2022.

The IWDG raised the issue of seismic surveys for renewable energy sites being conducted without license and in the absence of a regulator at the MSP meeting in July in the presence of Minister Peter Burke - Minister of State with responsibility for Local Government and Planning. It was acknowledged there may be gaps in regulation but these would be taken up by MARA once established in early 2023. In the interim an undertaking was made to raise the situation with the Foreshore License section at Dept Local Government and Planning and with the Foreshore License team at the Department of Agriculture, Food and the Marine.

## Military Sonar

Following the concern expressed by the government and fishing industry regarding the presence of the Russian Navy off southwest Ireland in January, the IWDG referenced our policy document on the impacts of Military Sonar on cetaceans in Irish waters as it was very relevant. The IWDG conducted a number of media interviews on the issue of the impact of military sonar on cetaceans. IWDG raised our concerns with the Russian ambassador. The exercises were subsequently cancelled and the fleet moved off.

## Expert Workshop on Biodiversity Protection and Energy Transition

The IWDG participated in a one day workshop addressing how Ireland can protect biodiversity and respond to environmental impacts while delivering necessary infrastructure to meet climate and renewables targets. The workshop was a joint initiative together with EirGrid and the Renewables Grid Initiative to engage communities and groups on various topics related to Ireland's energy transition.

## Other Policy Consultation Responses Submitted in 2022

- Response to the Public Consultation on Ireland's Marine Strategy Framework
   Directive Marine Strategy Part 3: Programme of Measures.
- Response to the Irish Offshore Strategic Environmental Assessment 6 (IOSEA6) – SEA Scoping Consultation.
- Submission to the Shannon Estuary Economic Task Force reminding them that they operate within a European MPA which may constrain their aspirations without appropriate action.
- Submission on Ireland's 4th National Biodiversity Action Plan (2023-2027) evaluating the marine elements of the plan.

## **WELFARE**

The welfare of whales, dolphins and porpoise at the individual level is very important to the IWDG. While population effects are addressed through IWDG conservation initiatives, welfare issues are addressed at the individual level, where IWDG adopts and promotes international best practice. IWDG appointed Sloan Massie to the role of Welfare Officer in 2021. The welfare of individually live stranded animals has been an ongoing issue, and in 2022 we were delighted to take on Gemma O'Connor as our Live Stranding Network Coordinator.

## Live Stranding Network Coordinator, Gemma O'Connor

IWDG were successful in our Animal Welfare Grant application to the Department of Agriculture, Food and the Marine. This funding has been used to support Gemma O'Connor in managing, training, supporting and growing the Live Stranding Response Network, thereby increasing the chances that there will be an experienced volunteer involved in stranding responses with access to the proper equipment and knowledge to guide them in taking the best course of action for welfare of the animal.

## Large Whale Stranding Protocol

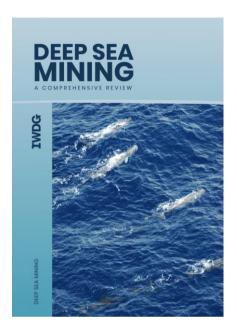
IWDG prepared a Large Whale Stranding response Protocol which was circulated to relevant and interested parties during 2022. The protocol advises on the best course of action for both live and dead large whale strandings. Although there were no live strandings of large whales in 2022, the protocol was used to advise various County Councils on the best methods of carcass disposal.



## **POLICIES**

## Deep Sea Mining

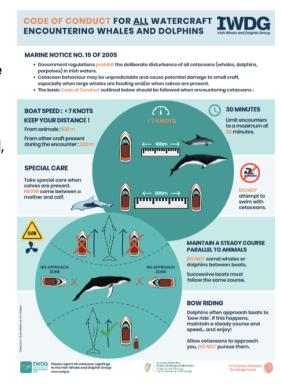
The IWDG published a review of Deep Sea Mining to inform the current debate on this issue. The review provides comprehensive information on the impacts that deep sea mining will have on the marine environment, and condenses the information so that it can be accessible to a wide audience. The potential catastrophic impact of mining operations on the deep-sea environment is undeniable. These are habitats currently largely unexplored by man and far removed from all human settlements, and therefore difficult for many people to appreciate what impacts DSM might have on these marine habitats and resources.



The review concludes that: 'The Irish Whale and Dolphin Group does not wish to support DSM at this time as knowledge of deep-sea habitats are extremely limited and any commercial mining is acknowledged to lead to widespread benthic biodiversity loss at a time where the planet is already looking at the collapse of biodiversity worldwide.'

#### Marine Tourism

We have created a <u>code of conduct poster</u> which highlights the guidelines for correct procedures when encountering whales and dolphins in Irish coastal waters, as outlined in the Marine Notice (No.15 of 2005) (Figure 1). Areas where significant marine tourism operates or increased boating activity occurs were identified, and the poster was distributed accordingly. The poster is now visible in ports, marine tourism centres, sailing and powerboat schools and popular wildlife spots. A poster was also delivered to each of the watch leaders ahead of the national Whale watch day. Outreach events were also organised to promote awareness of Marine Notice 15 in sailing clubs.



## MEMBERSHIP, EDUCATION AND OUTREACH

We continued to increase engagement with IWDG members and the public, sharing our knowledge and enthusiasm to promote our conservation actions and priorities. We did this through support and engagement with our Local Group network, Participation in Events such as National Biodiversity week and Heritage Week and IWDG specific events such as Floating Classroom, Connemara Sea week, Irish Skipper Expo and a very local event in Kilkee, 'The Wonderful Wildlife of West Clare'.

## Highlights

#### Key highlights include:

- Continued support for our growing membership and local groups participation
- Transition year programme for second level students; IWDG took on ten TY students for work placement.
- Delivery of online species identification workshops, strandings theory refresher and how to do a headland watch
- Floating Classroom
- Residential whale watching course weekend in CECAS, Cork
- IWDG member whale watching trips in Sligo and Baltimore
- New JNCC MMO Courses were delivered

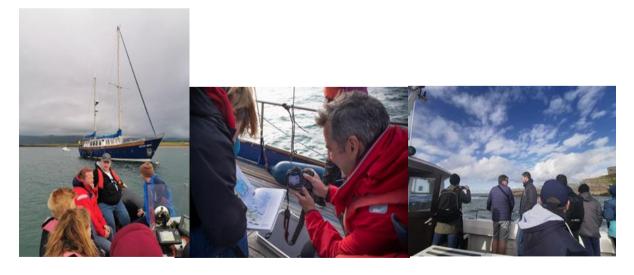


First of two whale watching weekend courses at CECAS, Leap, Co. Cork, May 2022 © Denis O'Regan

## Membership and Supporters

- We have several membership options:
  - o Family €40
  - Standard single €30
  - o Junior €20
  - o OAP and Student €20
  - o Corporate €250
- The payment options are a) a one year membership via Stripe card payment with the option to select annual auto-renewal and b) Standing order. If a member wishes to pay via a single cash payment, we have a means to facilitate this too. The members have a means to change the payment method in the members area in the "My Account" section on www.iwdg.ie
- We had 865 membership renewals in 2022 up by just 15 renewals when compared with 2021. As per March 2023 there were 955 members. Although renewals seem to have plateaued, we are seeing an increase in support via donations, Adopt a Whale (78) and Dolphin (37) and purchase of merchandise. We have seen a further increase in supporters subscribing to our monthly ezine with figures for December 2022 showing a total of 2589 subscribers when compared to 2080 in 2021 These figures come from the monthly status emails from Mailchimp that come to enquiries@iwdq.ie.

## **IWDG Local Groups**



The IWDG recognises that in order for members to actively participate in IWDG activities primarily the sighting and stranding schemes they need support, guidance and a mechanism to meet other like-minded members in their area. To

enable this, local groups have been created. Each local group has a dedicated WhatsApp group whereby members can easily communicate with one another on relevant news including coordinating responses to stranding events and organising field work such as headland watches. Local groups also make it easier for the Education and Outreach programme to identify and address member needs more effectively as members now have a mechanism to request information and or training from IWDG Education & Outreach (E&O) Officer, Sibéal Regan who is the point of contact for members within the group.

Newly established Cork Local Group is growing from strength to strength and one more group has been added to the list with Wicklow being represented now which brings a total of 12 local groups in Ireland!

#### Northern Ireland Local Group

The Northern Ireland officer attended a scoping meeting for the potential for a Marine Hub in Northern Ireland (NI). A NI Marine Hub will enable stakeholders (from the fishing industry, eNGOs, scientific researchers and government) to identify emerging issues and strategic research agendas to address areas of common interest in the marine environment. During 2022 the IWDG remained engaged in the MarPAMM project to develop tools for monitoring and managing a number of protected coastal marine environments in Ireland, Northern Ireland and Western Scotland. IWDG also maintained a watching brief on the consultation for fisheries management measures for Marine Protected Areas (MPAs).



A one-day Whalewatching Course was run on Rathlin Island in April, with land-based watches and a round-Island boat trip, accompanied by talks in identification and survey methods.

Another land-based whale watch and boat trip was conducted on Rathlin for National Biodiversity week in May.

In May we also welcomed the IWDG's floating classroom to Northern Ireland in May with visits to harbours and schools in Ardglass, Bangor, Ballycastle, Portrush and

Derry, and with the support of our Northern Ireland Officer and colleagues from Ulster Wildlife.

Other highlights from the year included the appearance of our last two resident Killer Whales, John Coe and Aquarius off the Co. Down Coast in March, and again off Rathlin Island in September. There was an endless stream of bottlenose dolphin sightings along the north and northeast coasts, while in August we had watches at Bloody Bridge, Co. Down and Ramore Head, Portrush for Whalewatch Ireland 2022.

In September IWDG attended the Climate Craic festival in Belfast, and in October we linked up with our colleagues in AFBI to deliver two talks on acoustic monitoring for Cetaceans in NI waters, and Photo-ID of bottlenose dolphins in NI waters. Finally, in November our NI Officer Cara Bradley gave a talk to the Environment class and Science club at Action Mental Health Promote in Bangor.

## **Training**

A member survey in November 2021, highlighted the importance of training to our members to enable them actively participate in the work of the group. In response to this feedback, workshops and webinars including fourteen online seminars have been delivered to local groups on species identification, how to conduct a headland watch and refresher course on the theory behind live standings as part of winter series of online workshops. In addition to this, two residential whalewatching and identification weekend courses were organised in West Cork by IWDG Sightings



Officer Pádraig Whooley. Sligo local group learning how to use a spotting scope and binoculars on a headland watch in Mullaghmore Head, Co. Sligo

Following a live mass-stranding of six common dolphins in Mayo, a resource gap was identified in the stranding network. With the help of Gemma O'Connor, the group's new Live Stranding Network Coordinator, a new training programme has been initiated to include five live-stranding courses per year. These courses took place in Cork, Donegal, Waterville, Fenit and Wicklow were postponed due to low numbers.



#### Donegal Live Stranding training 2022

A course on "Humane euthanasia of Cetaceans for veterinary practitioners" was
delivered in May 2022, at the State Laboratory, Blackweston in Celbridge Co.
Kildare. This course was funded by the 2022 Animal Welfare grant. The course
was specifically to enable veterinarians to be able to identify if a cetacean
should be euthanised, the various options available, which are recommended

and why, and how to carry them out safely and efficiently. Attendees were taught identify the various species of cetaceans that live strand along coast, while also Irish becoming familiar with their anatomies.

A key contributor to the course was Dr. James Barnett from



Cornwall, UK and included a lecture portion as well as a practical in the wet lab

with several guest contributors as well as the IWDG. This course was accredited by the Veterinary Ireland towards their professional development.

- Online workshops were given on species identification and how to conduct headland watches to members and the public throughout the year.
- Four Workshops with disadvantaged young people were delivered through family resource centers after schools programme
- Ten transition year students accepted work placements in the Shannon Dolpin Centre, Kilrush.

#### Shannon Dolphin Centre

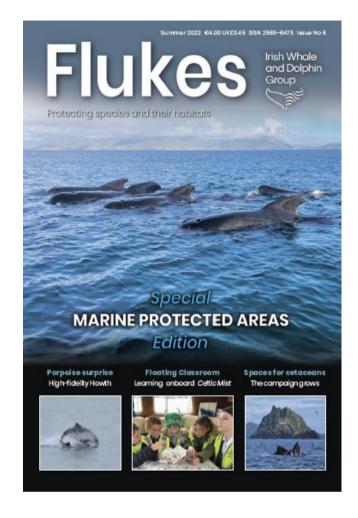
The IWDG core group is hosted in the Shannon Dolphin Centre in Kilrush. The centre is an educational space which hosts and displays collections of cetacean artefacts and skeletons and also acts as a research hub for the Shannon Dolphin Project.



Shannon Dolphin Centre

### **Flukes**

We printed a special issue (#6) of the IWDG magazine Flukes in 2022 to highlight the work on Marine Protected Areas (MPA) with our involvement in the Fair Seas campaign.). News from other partner projects are front and centre with interesting news from Cabo Verde, an EU funded project called OCEAN aimed at reducing ship collisions with large whales and of course the sad news of the passing of Dr. Don Cotton, our first chair of IWDG. The usual updates Strandings and Sighting with news of a new stranding pilot scheme. Citizen science showing its strength with an emerging photo-id catalogue for Harbour Porpoise off Howth. New Science Officer Becky Dudley shares her work on Deep-sea mining and the risks associated with it. This issue was edited by Simon Berrow with contributions from key officers within IWDG and had a print run of 1,500 copies.



#### **Events**

#### Irish Skipper EXPO

The IWDG attended this year's Irish Skipper Expo at the University of Limerick sports complex in March. This provided us with a great opportunity to reconnect with some old faces whilst meeting many new ones involved in both fishing and of course offshore renewables, a sector that seemed to occupy a significant number of the stands, reflecting "green" developments coming down the line.

Full update here: https://iwdg.ie/iwdg-at-the-irish-skipper-show-in-ul/

#### Citizen Assembly on Biodiversity

IWDG were invited to present at the Citizen Assembly on Biodiversity in November 2022. The IWDG shared three ideas: firstly we need knowledge, secondly we need to build partnerships with inshore communities and finally we need to build an ocean literate island nation so we all are concerned and embedded in the health of our marine biodiversity.



#### National Biodiversity Week

IWDG delivered four land based watches on Loop Head, Co. Clare, Cloghna Head, Co. Cork, Howth Head, Co. Dublin as well as one-day event on Rathlin Island, Co. Antrim, which combined both a land based watch from the fabulous RSPB West Light reserve and a pelagic boat trip in association with Kintra Tours. This event was attended by 40 whale enthusiasts who met at Ballycastle Pier, North Antrim (image below).



IWDG's Rathlin Whale Watch Event for National Biodiversity Week 2022

#### Heritage week events

#### Whale Watch Ireland

On Saturday 20th August the IWDG delivered Whale Watch Ireland 2022. All-Ireland Whale Watch Day, now in its 20th year, comprises free, guided landbased watches, spread over 13 counties, and in all four provinces and continues to be one of the largest events on the wildlife calendar. Irish maximize the impact of this event it was once again timed



to coincide with Heritage Week, thus helping us introduce this event to as wide an audience as possible. The main objective of Whale Watch Ireland is to raise awareness of the 25 species of cetaceans (whales and dolphins) recorded to date in Irish waters, and to promote their conservation by highlighting public participation in our successful recording schemes, which encourage members of the public to report sightings and strandings to the IWDG.

As usual there was a good mix of both Irish and overseas visitors to the watches, and for some attending, this was their first encounter with a cetacean in the wild in Irish waters. Those attending at many of the sites were provided with interpretation by IWDG personnel, who have considerable experience regarding cetacean identification, ecology, biology, and the conservation threats facing these marine mammals.

An assortment of whale artifacts was on view at some sites, and there were plenty of handouts and information sheets supplied by both IWDG and Inis, the event's sponsor. This year's event was attended by around 530 wildlife enthusiasts and visitors at 18 sites. IWDG is delighted to see the resumption of All-Ireland Whale Watch Day and are pleased with the overall result.

#### Let's talk blubber webinar

This was hosted on Zoom and explored the wonderful world of whales. We took a journey through time looking at their origin 55 million years ago up to our modern day whales, discussed survey techniques employed by marine biologists and most importantly explained how whales and dolphins play a key role in ecosystems today based on adaptations they evolved over time. This webinar was suitable for young people aged between 6 and 12.

Dolphin Scavenger Hunt, Kilrush Co. Clare.

This event was a family friendly event aimed at young people between the ages of 5 and 12 and took place in the Shannon Dolphin Centre In Co. Clare and the surrounding town of Kilrush. The IWDG were delighted to be prize winners in the Heritage Council awards Wild Child category for this event and plan to continue running this event in the future.



#### Connemara Sea Week

Sea Week celebrates the wonderful marine biodiversity and cultural heritage of North-West Connemara. This year's festival (38th) took place in October and had a particular focus on climate action and aims to engage young people to empower them to become agents of positive change.

The IWDG was asked to deliver several workshops to four local primary schools, the main secondary school for the area and a workshop aimed at vulnerable and atrisk youth enrolled in the Letterfrack YouthReach scheme.



Image 1: Whale Jenga and Image 2: Formal letters written during Connemara Sea Week

#### The Wonderful Wildlife of West Clare

This evening of film and stories was delivered in Kilkee's Culturlann Sweeney theatre in August. It brought the audience on an exciting "virtual" sea voyage, where IWDG officers shared stories of the unique population of Dolphins in the Shannon Estuary, the amazing Humpback Whales, Basking Sharks and Porpoises, and much more, who inhabit the waters on our Western Shore off the Loop Head Peninsula.



#### Whale Tales

We held our annual 2022 conference in March 2023 after postponing our 2022 event due to COVID. It was held in the Radisson Blu, Rosses Point, Sligo and was very well attended.



The Theme of Whale Tales 2022 was to celebrate 30 years of the IWDG, looking back at what has been achieved to date and taking a look into the future to see where the group is going.

The session began with a review of Sightings and Strandings for 2021 (confusing?, yes, but remember this is our 2021 Whale Tales with some 2022 updates), followed by Celtic Mists skippers telling tales of Celtic Mist surveys. A poignant reflection on 30 years with Dr. Don Cotton was followed by deep discussion on MPA developments and the Fair Seas campaign. Local Group members Introduced



themselves and shared stories of how they contribute to the work of the group In their areas.

A full report can be found here <a href="https://iwdg.ie/whale-tales-2021-2022-summary/">https://iwdg.ie/whale-tales-2021-2022-summary/</a>
But you must be an IWDG member to access this.

#### **Distinguished Contributors Awards 2022**

Distinguished Contributors Awards is a series of annual awards which acknowledges those who have made a significant contribution to the work of the IWDG. The awards made in 2022 were as follows:



The recipient of the DCA from the IWDG for Cetacean sighting scheme is **Sandra Donovan** and the recipient of the DCA from the IWDG Cetacean Stranding Scheme is **Gemma O'Connor.** 

The recipient of the DCA from the IWDG for R.V. Celtic Mist is **Stephanie Levesque** and the recipient of the DCA from the IWDG for Best use of IWDG Data is **Aylis Emerit.** 





## **CELTIC MIST**

Celtic Mist had a busy season in 2022. Cruising for a full four months the vessel had over 110 different people on board and a big variety of tasks were enjoyed by the various crew. During the Season Celtic Mist circumnavigated Ireland completing with twelve weeks in commission including two weeks of floating classrooms and two weeks dedicated to the Shannon Dolphin Project.





Drone image taken in the Shannon Estuary by Marcus Hogan

#### Research

Previous data collection protocols were examined on IWDG's research vessel and thoroughly analysed to see how data collection could be improved. A new data collection programme was created which aimed to expand and to simplify the data collection on board. Effort-corrected data was collected during the season which is essential for accurate spatial analysis of marine mammal distribution and habitat use required for conservation management. All the data collected on board will be integrated into our wider sightings data. A data collection manual was created outlining the new protocols. In total 26 marine biologists received

training on the new protocols and 47 members learnt new identification and survey techniques.



## Floating Classroom

IWDG officers sailed on R.V. Celtic Mist for two weeks delivering dedicated workshops based on Ireland's Blubber Book to schools in coastal communities from Dublin to Belfast as part of the floating classroom initiative. The workshops included tailored presentations, discussion groups, interactive games and presentation artefacts including baleen plates, whale ears, eyes and skulls which brought the Floating Classroom event to life. The Floating Classroom initiative offers young people the opportunity to engage with education for sustainable development (ESD) in an interactive, immersive out of classroom setting.

For two weeks in May Celtic Mist travelled along the coast visiting Dublin, Malahide, Carlingford, Bangor, Portrush, Greencastle and Derry. This year's route embraced the All-Ireland nature of the IWDG with Celtic Mist transiting up the coast of Northern Ireland. The cross-border collaboration with the Ulster Wildlife Trust resulted in schools from both sides of the community, as well as integrated schools being

visited, where pupils learnt about the cetaceans in our waters, which by their nature have no respect for geographical boundaries.

IWDG supporters and members as well as home schooled children were welcomed onboard Celtic Mist in each port and given a tour and a shorter, more informal workshop based around whale bone artefacts brought from the Shannon Dolphin Visitor Centre. In total over 700 young people were reached during the initiative.



Home schooled children exploring the IWDG baleen and whalebone collection on board Celtic Mist in Carlingford Lough for an informal workshop during Floating Classroom 2022.

## Maintenance & Training

Starting with a training week at the start of May out of Poolbeg, there were day sails to get skippers and mates up to speed with the changed systems on board and to hone their skills in manoeuvring and sailing our 30-tonne vessel.

For the remaining three months Celtic Mist had one break for lifting and hull cleaning and painting. The lifting was made successful by a great group of volunteers, greatly supplemented by the interns and the Kilrush team. There was one 'outage' for a week when a battery box flooded and took out batteries and an alternator. Mick was on board at the time and dealt with the repair and replacement. Such events are bound to happen and we have been lucky over the years in very few such events.

The season ended with some training days, again out of Poolbeg, where some local youngsters joined the IWDG for the purpose of furthering their seafaring skills. Celtic Mist returned to the Grand Canal Basin in October for the winter maintenance programme.

## COMMUNICATIONS

Our main target audiences or groups that we communicate with are IWDG Officers, Members and Local Groups, General public and government agencies. We communicate to increase ocean literacy and to raise awareness of issues and threats facing cetaceans. We issue calls to actions to raise funds, join events, become a member, support the group through purchasing merchandise etc.

We use our well established IWDG branding to build trust within these groups...

Communication **within the IWDG** is achieved mainly through monthly conference calls and emails. We share our message and updates on our work to our **members** through social media, website news articles and monthly ezines with additional ezines to promote specific events. We broadcasted our regular Blubber Bulletin to Facebook hosted by IWDG officers with guest contributors sharing their stories. Social media channels such as Instagram, Facebook and Twitter allows us to communicate with a broader audience.

#### Media

We continued to reach members of the public, IWDG members and supporters, key



stakeholders across as many platforms as possible. IWDG officers gave interviews on national and sometimes international radio speaking on various issues relating to Whales and Dolphins.

IWDG contributed a monthly column to the **Marine Times**, a magazine targeted at the fishing industry in Ireland as well as

Tom McSweeney's Maritime Ireland radio programme. Contributions included articles on marine protected areas, deep-sea mining, military activities, and

cetacean sightings and strandings of deep-diving whales. This provides a fantastic opportunity to get our message out to mariners and specifically the fishing community.

Podcasts are a great way to broaden our reach to the public, for example, education and Outreach Officer, Sibeal Regan contributed to the popular **Science Tale**s

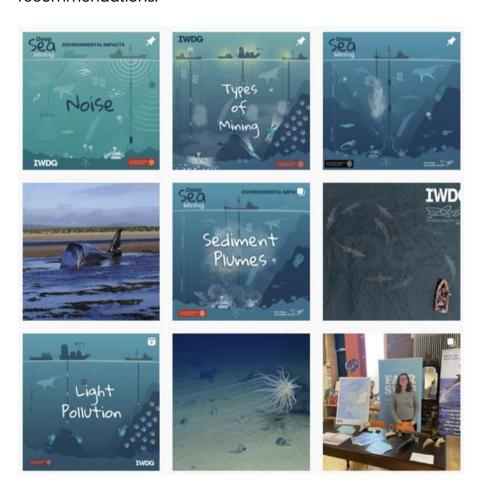


podcast produced by Eoin Murphy (Episode 2 The Elements of Clare - The Water)

IWDG also contributes to a range of publications such as **Biodiversity Ireland**, which is the National Biodiversity Data Cantre's bi-annual magazine, with sighting and stranding summaries from IWDG officers.

#### Social Media

A number of high profile campaigns were driven in 2022. The IWDG response to the threat of Deep Sea Mining was a new policy with background information and recommendations.

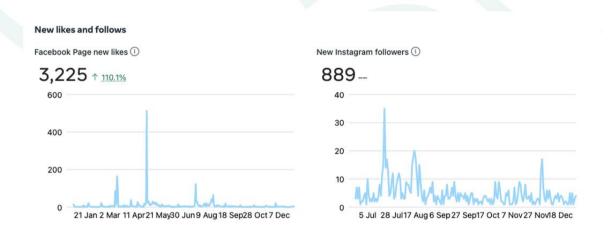


A monthly content calendar was designed and reviewed with posts scheduled with different days for sightings, strandings, research, membership and merchandise and the very popular flukey facts. When notable news occurs, posts are created to inform our audiences on those events. Posts are very visually engaging and interactive to appeal to a wider audience. Serious science based posts are a regular feature of the IWDG social media demonstrating the science based approach to emerging issues and to development of policy to deal with them.

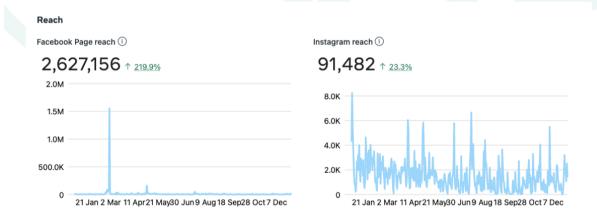
#### Facebook and Instagram status

A healthy increase in followers and a significant increase in the reach which is more important.

# Year End 2022 followers and likes Facebook 36,000 / Instagram 8542



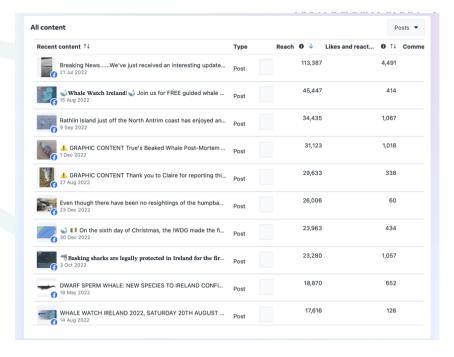
## Facebook and Instagram Reach 2022



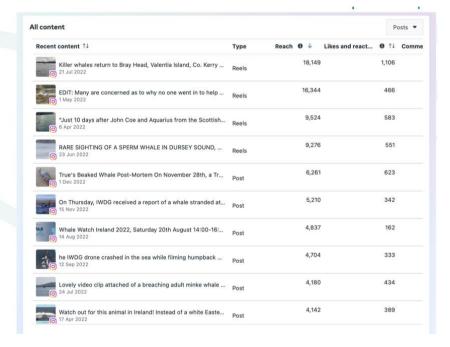
#### Top posts:

Peak post is the stranded Dwarf Sperm Whale for which we received much negative feedback on social media. People were i.e. why do we not help the animal?) More negative comments on Facebook than Instagram. Strandings Officer, <a href="Stephanie Levesque">Stephanie Levesque</a> wrote a very detailed article on this unusual stranding here: https://iwdg.ie/dwarf-sperm-whale-new-species-to-ireland/

# Facebook -Top Posts 2022



# Instagram -Top Posts 2022



#### **Twitter status**

Twitter continues to grow steadily with a 14% increase.

## Twitter 2022

- + 964 followers
- ~14% increase



#### **WEBSITE**

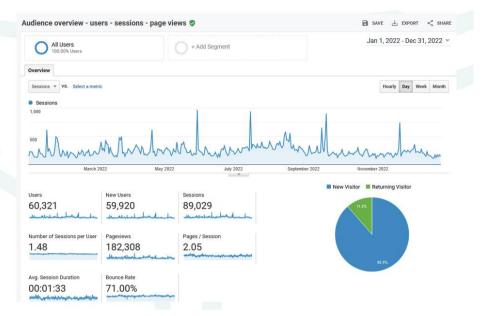
Our website <a href="www.iwdg.ie">www.iwdg.ie</a> continues to be the source for all information regarding the group. Events and News articles are kept fresh. Sightings and Strandings are visible on the home page with the top 10 of each being highlighted. The Report a Stranding or Sighting stands out and encourages our visitors to contribute to these important citizen science schemes. We continue to translate the content to Irish, thanks to our Irish Language Officer, Pádraig De Bhaldraithe.

#### Website analytics

In terms of analytics, we have had over 89k sessions, that is, unique visits to the site over the year with over 60k users with on average 243 visits/sessions per day peaking to ~1000 for a high-interest news event. We have seen a 20% decrease in users and ~20% decrease in sessions per user. Home page, species, About Us, News and Shop are the most popular landing pages. This may be attributed to the increase in membership and the increased social media campaigns focusing on becoming a member and supporting the group through the shop

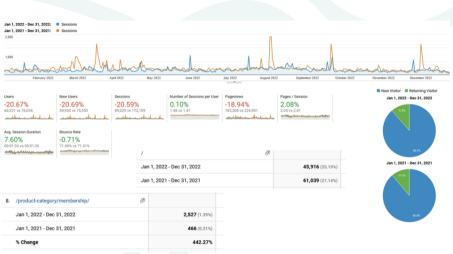
# Website analytics 2022

- ~243 sessions per day
- ~165 users



# Website analytics 2022 vs 2021

- 20% decrease in users and 20% in sessions or visits
- Home page, Species, Shop and News most popular.



## **IWDG CONSULTING**

IWDG Consulting had a very successful year being involved in a number of major infrastructure projects including MasterPlan 2 for Dublin Port. IWDG Consulting continues to employ a full-time marine mammal ecologist in Dublin Port (Clowie Russell).



IWDG won two tenders offered by the NPWS in Marine Protected Areas (SACs). We delivered a fourth survey of harbour porpoises in the Blasket Islands SAC, designed to derive density estimates and an abundance estimate of bottlenose dolphins in the Shannon Estuary using mark-recapture.

A lot of consultancy work was carried out in the Shannon Estuary including boast-based dolphin and seabird surveys, static acoustic monitoring and VP watches; all associated with long-term plans to develop energy hubs in the estuary. The IWDG are acknowledged as the "experts" in the estuary to represent the dolphins and their habitats.

Marine Mammal Observers were supplied for coastal works at Dinish Island, Killybegs and in Arklow as well as a cable laying project between Galway and Iceland and three Annex IV Assessments

IWDG Consulting were contracted to carry out static acoustic monitoring at two proposed offshore wind farm sites off the southeast coasts by Energia and provided MMOs for Codling OWF during site investigations. These provide important opportunities to build relationships with ORE companies to ensure our concerns, especially regarding the impacts on underwater noise, are heard and taken onboard.

IWDG Consulting engaged 10 independent consultants to work on these projects and continues to provide a very important income stream for the IWDG, as well as having a positive influence of planning.

For more information, see: <a href="https://consulting.iwdg.ie/">https://consulting.iwdg.ie/</a>

## **FUNDING**

The full set of audited accounts for 2022 and previous years are available on our members section of the website: <a href="www.iwdg.ie">www.iwdg.ie</a>. The IWDG is funded by a variety of agencies contributing to the overall development of the organisation and project specific work. The IWDG also receives funding through donations, membership fees, merchandise and resource sales, corporate sponsorship and consultancy work (through IWDG Consulting). In 2022, the IWDG received core funding from the Heritage Council of Ireland and the Irish Environmental Network.

We developed a new model for sponsorship to give potential donors or sponsors different options depending on their organisation size. The Entry level is most popular with just 1 top corporate 5 sponsor, Inis to whom we are hugely grateful. Inis support our Shannon Dolphin Project, National Whale watching day and contribute to core costs.

#### Corporate 2 - Supporter Corporate 5 Corporate membership Price: €250 Investment: €500 - €2000 Investment: €11,000-€30,000 IWDG Offering: IWDG Offering: **IWDG Offering:** · Certificate issued · Certificate and Pack issued All of Corporate 4 plus IWDG Pack - Guide to Ocean · List your company on sponsor · Provide 2 annual information talks Giants and policy documents page on iwdg.ie on Whales and Dolphins in Ireland to your employees Corporate 3 Corporate 4 Provide a platform for your company representatives to Investment: €3000 - €5000 Investment: €6,000-€10,000 observe cetaceans on the water **IWDG Offering:** or on the land with an expert once **IWDG Offering:** a year (numbers depend on · Certificate and Pack issued investment) Include your company on · Advertise partnership with the sponsor page on iwdg.ie with Listing on Flukes magazine with IWDG on your website Logo on featured block · Advertise partnership with the · Listing on Flukes magazine Sponsorship media launchPromote your company on the IWDG on your products IWDG Blubber Bulletin broadcast · Provide an annual information talk on Whales and Dolphins in Ireland to your employees · Advertise partnership with the



















## LOOKING FORWARD

The IWDG has worked hard to ensure we are relevant and resourced to carry out our work. During 2022 we have continued to improve our structure, governance, membership and financial administration. There has never been more demand on our data to inform MPAs, offshore renewables and Marine Spatial Planning but we need to be involved in the process and not just be considered "data providers". To assist delivery of this the IWDG appointed a new full-time Science Officer in 2022 to support our work and plans to appoint a Marine policy Officer in 2023 pending sufficient resources.

We will continue to increase our consultancy work as it provides an important "independent" funding stream which we can spend at our discretion and not linked to specific outputs. This provides us with enormous power and are not constrained by funders requirements or current whims. IWDG Consulting has been very successful during 2022 which should enable us to support our plans in 2023.

We will continue to engage with government agencies and the industry, especially regarding offshore renewables and marine spatial planning to ensure we continue to conserve and protect areas of our waters for cetaceans.

So we can look back at a very successful year but in the knowledge we must expand our team and support our members more going into the next year.



Celtic Mist approaching the Skelligs © Seán O'Callaghan

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