

Irish Whale and Dolphin Group

Annual Report 2018



Humpback Whale in Ísafjörður, Iceland © Brendan Quinn



STATEMENT FROM THE BOARD

A very busy year, culminating in the “Ireland to Iceland” trail of the whale talks held all over the country, which has already had a positive effect on membership, and hopefully has more to come. Directors’ work this year was more of the same, along with several new features. We welcomed Trea Heapes into her role as coordinator and Susanne Matejka as book-keeper and advisor on due diligence.

The new Charities regulations have come into effect, making the Directors roles more responsible, with increased emphasis on governance, structures and especially planning. Watching what is going on in some sporting bodies, and even medical facilities, makes one aware of the negative publicity that comes with exposure of poor management decisions. In Conal and Niamh we have highly motivated, experienced, and very helpful advisors with some experience in these roles in the working environment, which is invaluable in our own governance. Along with re-building our website we have seen new livery and logos, and the promise of a much improve sightings strandings, shop, and membership sections online. The wheels are turning, and work continues with some results already obvious.

Education and outreach continue apace and following on from Iceland our series of lectures have raised our profile as we continue to exhibit Tony Whelan’s excellent work to the public. To this end we have a clear mission statement now, and Simon strives at every opportunity to emphasis the difference between our scientific based “citizen science” body and a protest group. The very welcome boost from Ryanair sponsorship has really cemented project expansion, and gives a reassurance that our group is seen as “the genuine article” not a mish-mash of poor governance and this comes down to the oversight of all our directors who meet regularly to discuss any issue that may arise, as well as all the regular agenda items like membership, website, shop, contracts, and accounts.

Finally a huge thank-you and acknowledgement has to go out to Fiacc and the “Celtic Mist” team who put in serious hours of thought, effort, man-management and grunt into repairing and maintaining our flagship and has been from the get-go the passion of our fellow director Fiacc O’Brolchain.

For the year ahead we will see improved governance in the form of hours mapping, expenses vouching, project planning, mission statement, with web, education and membership projects running in conjunction with our Officers’ scientific projects and contracts. As we hear so much about plastic, so too are we reminded of the “invisible” contaminants that are threatening cetaceans, their prey, and even us. The work on acoustic noise and chemical residues will further enhance the need for our body. To this end we will have to reserve the right to share all of our data as we see fit, and not let it be used to win over contracts in competition with us, as that would be poor governance, yet as a “citizen based” group we need to balance this with information to the public.

IWDG has set out on an exciting new course, and the ship feels very much renovated, very much planned, set on course, and with tight lines. Not a faulty servo in sight!



Brendan Quinn
Chair of the Board of Directors

STATEMENT FROM OUR CEO

This past year has led to great but positive changes for the IWDG. We have been trying to engage with more people at member and officer level. Lorraine Bull left us to return to Dublin after steering the IWDG for 18 months. This enabled us to review our structures again and not only take on a new book-keeper Susie Matejka, but also Trea Heapes to provide an oversight/co-ordination role. Some officers have left, others have joined. Inevitably, there will always be a turnover of people but we must keep the core strong. I myself have freed up more time for the IWDG having gone part-time at GMIT. With IWDG Consulting growing too it is important to ensure we have the structures in place to support this larger IWDG. This has led to better planning, communication and management.

IWDG took on one of its biggest challenges to date – sailing to and circum-navigating Iceland. No mean feat. This took great commitment and support from key people such as Fiacc O’Brolchain who manages Celtic mist on behalf of the IWDG and skippers and officers. Membership numbers are starting to rise, including the return of lapsed members. Social media reach is building meaning we are getting better at spreading our message and telling our stories. *IWDG Consulting* continues to be strong, which is essential given that other sourcing other funding is difficult and this consultancy effectively funds IWDG activities.

IWDG members signed off a new 3 Year Plan (2019-2022) which outlines some key objectives. The theme is better communication with members and the media. IWDG must continue to embrace its strong scientific roots to ensure it is the credible source of cetacean information and opinion on the island of Ireland. We need to engage with more people, get more people involved in the IWDG. I feel optimistic about the years ahead and as we hear of news regarding the impact of climate change, biodiversity loss and uncertainty in our political systems, we need to be louder, stronger and influential like never before.

Dr Simon Berrow
Chief Executive Officer



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2018 HIGHLIGHTS



1,426 sightings and 263 strandings of whales and dolphins recorded in Irish waters.



Continued to document the increase in common dolphin strandings, but continued funding of the post-mortem project might shed some light on possible causes.



Contributed to the consultation on trawling within 6nmls which restricted larger vessels to fishing outside 6nmls which IWDG supported



Conducted education and outreach to promote the importance of protecting marine wildlife to c. 3,000 people.



Documented a UME of Cuvier's beaked whales- the largest event for this species anywhere in the world



WhaleWatch Ireland 2018, the IWDG flagship outreach event now in its 18th year was attended by around 1000 people at 19 sites, and produced sightings at 73% of sites.



Sailed to Iceland and back and documented 55 individual humpback whales and 3 blue whales



Celtic Mist in Brandon Bay with the North Kerry local group © Seán O'Callaghan

ABOUT THE IWDG

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 IWDG activities.

1. 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 whalewatching in Ireland.
7. The IWDG prepare a three-year plan following consultation with members.

Governance

The IWDG is a registered charity (Charity Number: CHY 11163) and registered with the Charity Regulatory Authority (No. 20029913). The IWDG are governed by a voluntary board of Directors comprised of members to ensure good gender balance and diversity of skills to assist in areas such as governance, research, education and development. In 2018, the new IWDG Three Year Plan 2019-2022 was signed off by members at the AGM in Dublin in December. There were monthly board meetings and two officers' and directors' meetings plus eight officers' conference calls. The IWDG also appointed a new Book-keeper and Co-ordinator to look after corporate governance, finance and communications and revised the Officer positions.

IWDG Directors



Noirin Burke



Brendan Quinn
Chair of the Board



Frances Bermingham



Conal O'Flanagan
Company Secretary



Fiacc O'Brolchain



Niamh Ryan

Finance Sub-committee: Brendan Quinn, Conal O'Flanagan, Simon Berrow and Susanne Matejka

;

IWDG Officers (at end 2018)



Simon Berrow
Chief Executive officer



Trea Heapes
Co-ordinator



Pádraig Whooley
Sightings Officer



Mick O'Connell
Strandings Officer



Dave Wall
Conservation Officer



Seán O'Callaghan
Science Officer



Padraic de Bhaldraithe
Irish Language Officer



Mags Daly
Membership Officer



Cathy Hinds
Northern Ireland Officer



Meadhbh Quinn
Outreach Officer



Susie Matejka
Book-keeper

IWDG Membership

Current membership stands at 281 at the end of 2018, which is a slight increase on 2017. However, there is still significant improvement to be made, especially in retention of new members. While many of our members support us as they simply wish to support and acknowledge our research, education and conservation work, many members wish to gain something in return for their membership. In 2018, initiatives started in 2017, to combat a decline in membership were delivered and will hopefully continue to improve membership figures and retention. These initiatives included:

- Improving the IWDG welcome pack and introducing a gift element to renewing membership.
- Including a subscribe option
- Send out monthly Ezine newsletters to members to provide more information on the work of the IWDG.
- Increased social media presence and advertising membership options at key events
- Encourage local groups so members can meet like-minded people and be active locally
- Merchandising review and sourcing new items to sell online and at events.

Other initiatives to be rolled out in 2018 include:

- Create a membership strategy and action plan based on existing IWDG studies
- Create a subscribe option to receive free newsletter to build interest in IWDG work
- Provide more opportunities that are only available to IWDG members
- Provide more cruises on *Celtic Mist* for members
- Develop an Adopt-a-Whale or Adopt-a-Dolphin Scheme to encourage new members
- Create boosted posts to translate some of the social media follower to members



IWDG Head Office, Kilrush
Co Clare

IWDG Local Groups

The IWDG recognises that forming local groups is important for building a strong membership base and network for sightings and strandings and for members to meet like-minded people and get more active locally. To date we have five local groups (West Clare, Galway, North Kerry, Donegal and Northern Ireland) and we hope to encourage more groups during the next three years.

IWDG Northern Ireland

IWDG Northern Ireland continued their programme of great talks and whale watches. The group delivered talks and training workshops on the identification of whales and dolphins, conducted whale and dolphin watching trips from various headlands in Northern Ireland as well as watches and outreach as part of WhaleWatch Ireland and during Marine Week. The group also took part in recording strandings and attending stranding events.

IWDG Donegal

IWDG Donegal were actively involved in both reporting sightings and strandings and assisting at live strandings during 2018. The group also took part in outreach events as part of WhaleWatch Ireland and did a great job in promoting the marine wildlife off Donegal and assisting injured marine birds.

IWDG North Kerry

The local group attended the Wild Mind festival in Fenit in April, and Biodiversity week with an open watch at Brandon Head. IWDG North Kerry secured funding from FLAG for a pontoon to be stored at Brandon as this is a hot spot for liver stranding events.

IWDG West Clare

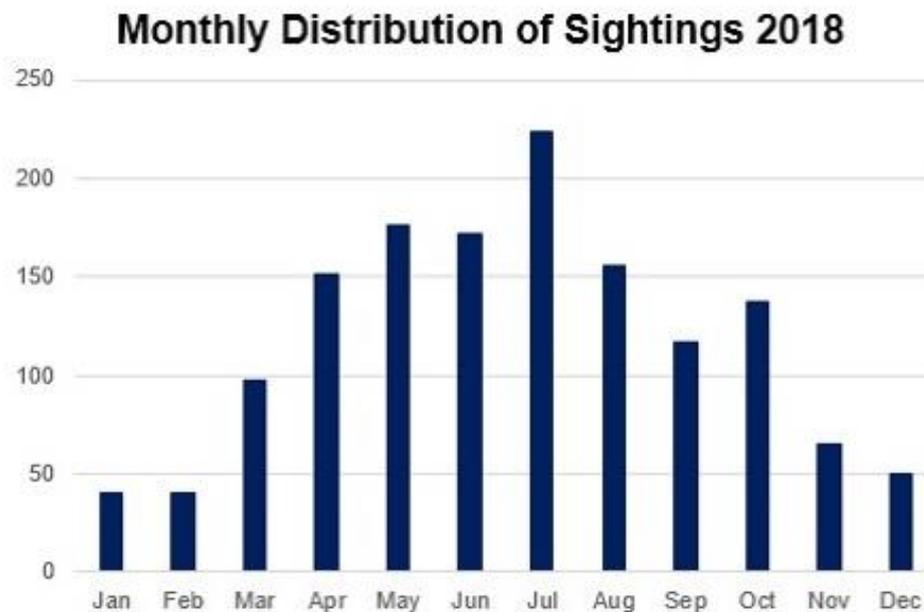
IWDG West Clare maintained its promotion of whale and dolphin watching and reporting of stranded dolphins during 2018. This was primarily through Facebook page (www.facebook.com/westclareiwdg/). The group took part in Biodiversity Week and Whale Watch Ireland with watches from Loop Head the carried out two offshore trips, open to members in search of humpback whales from Doonbeg.

IWDG Galway

IWDG Galway was established to promote the monitoring of whales and dolphins around the coast of County Galway and Galway Bay. There were many sightings of the solitary dolphin off Nimmo's Pier. The group also recorded strandings and took part in education and outreach at Seafest. IWDG Galway were involved in two public events in collaboration with the Galway-Mayo Institute of Technology.

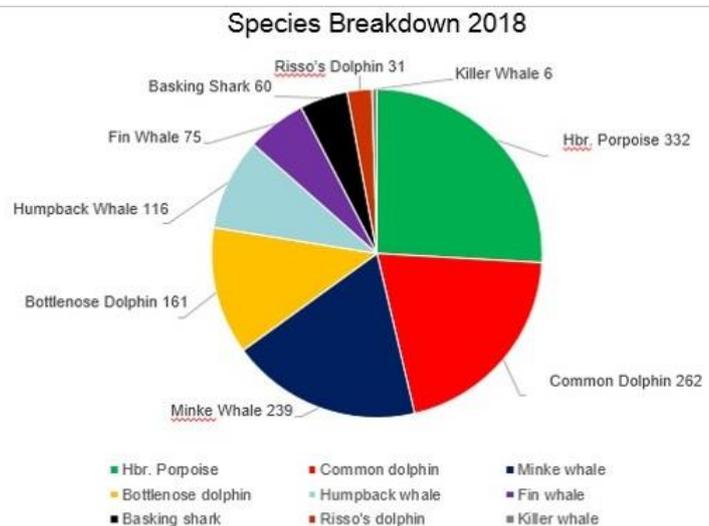
CETACEAN SIGHTINGS REVIEW

During 2018, the IWDG received and validated 1,426 cetacean and basking shark sighting records, combining both casual and effort related sightings. 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 and offshore off the west coast, which increases the species diversity to include some deep divers such as sperm and beaked whales.



In order of frequency of sighting records, the eight most frequently observed species were:

1. Harbour porpoise x 332 (23%)
2. Common dolphin x 262 (18%)
3. Minke whale x 239 (17%)
4. Bottlenose dolphin x 161 (11%)
5. Humpback whale x 116 (8%)
6. Fin whale x 59 (4%)
7. Basking shark x 60 (4%)
8. Risso's dolphins x 31 (2%)
9. Killer Whale x 6 (0.4%)



2018 Sightings Summary

During 2018, the IWDG received and validated 1,426 cetacean and basking shark sighting records from all inshore Irish waters. Of these, 62% were reported during the 5 months April-August, reflecting the seasonal bias in reporting. July was the peak month with 224 records (16%). Best not to over interpret this, as it merely reflects the summer holiday period, better weather etc, all of which result in a lot more observer effort and with a lot more people looking, there are more sightings. Almost 90% of records were

confirmed to species, with just 144 where we couldn't determine species with confidence and these were allocated to a non- species category. Still useful.

The harbour porpoise as usual was the most frequently recorded and widespread species with 332 records (23%), followed by the common dolphin 262 records (18%). In 3rd place is our smallest baleen whale, the minke, with 239 records (17%). Minkes are the one whale species that can be seen occasionally outside of the southwest "whale hotspots". In 4th place is the bottlenose dolphin with 161 records (11%) and Ulster's north coast counties of Antrim, Derry and Donegal produced the highest number of records with the West Coast not far behind with 51 records. This is an interesting change, as for many years the data would have shown the west coast as the best region for bottlenose sightings. In 5th place is the humpback whale with 116 records (8%), followed by the fin whale in 6th with 75 records (5%). The basking shark in 7th place had 60 records (4%). Risso's dolphins in 8th place had a relatively strong year with 31 records (2%). Everyone's favourite apex predator, the killer whale aka Orca is in 9th place, with 6 confirmed records...amazingly despite their scarcity, they still managed to make the main RTE News on two occasions in March and November 2018!

Regarding large whales, it can be difficult to see the trends from year to year. The 2018 humpback whale figures below show that as a % of all sightings, humpbacks seem to be consistent in recent years. But if we go back a decade to 2008, we only had 27 humpback sighting records, just 1.6% of the total in that year. This is a significant increase. Fin whales by comparison are showing no such % increase as the 2018 figures are identical to 2008 at 5%.

	Sightings/% 2015	Sightings/% 2016	Sightings/% 2017	Sightings/% 2018
Humpback whale	114 / 7.9%	144 / 8.4%	117 / 7.4%	116 / 8%
Fin whale	63 / 4.3%	115 / 6.7%	59 / 3.7%	75 / 5%

But perhaps a more telling statistic is a decadal comparison 2008- 2018 of the cumulative number of individuals from all sightings.

	No. Individuals 2008	No. Individuals 2018	Change
Humpback whale	60	273	+ 354%
Fin whale	517	190	-63%



Fin whale, West Cork, 1 Nov 2018, © Pádraig Whooley/IWDG

The effect of this is quite evident in West Cork, where back in the early 2000's, we got used to impressive fin whale trip tallies. We recall one trip on the Holly Jo in November 2004 when we stopped counting fin whales at around 40+ animals, for fear that people wouldn't believe us. This seems like a long time ago now. In recent years fin whales have been much scarcer and when we do see them, they are present in nothing like their former numbers and are invariably passing quickly through this once productive patch, as they search in vain for a dwindling supply of their favourite food.....sprat.

Humpbacks by comparison are doing much better and seem to have adjusted to the new reality of declining sprat stocks by switching to sand eels much earlier in the year (April to July).

The volume and geographic spread of sightings suggest that the IWDG Cetacean Sighting Scheme requires support and promotion especially off the northwest and relies on a small number of dedicated recorders to provide the bulk of sightings. We need to review the sighting scheme and to see why sighting reports have dropped to below 1,500 records.

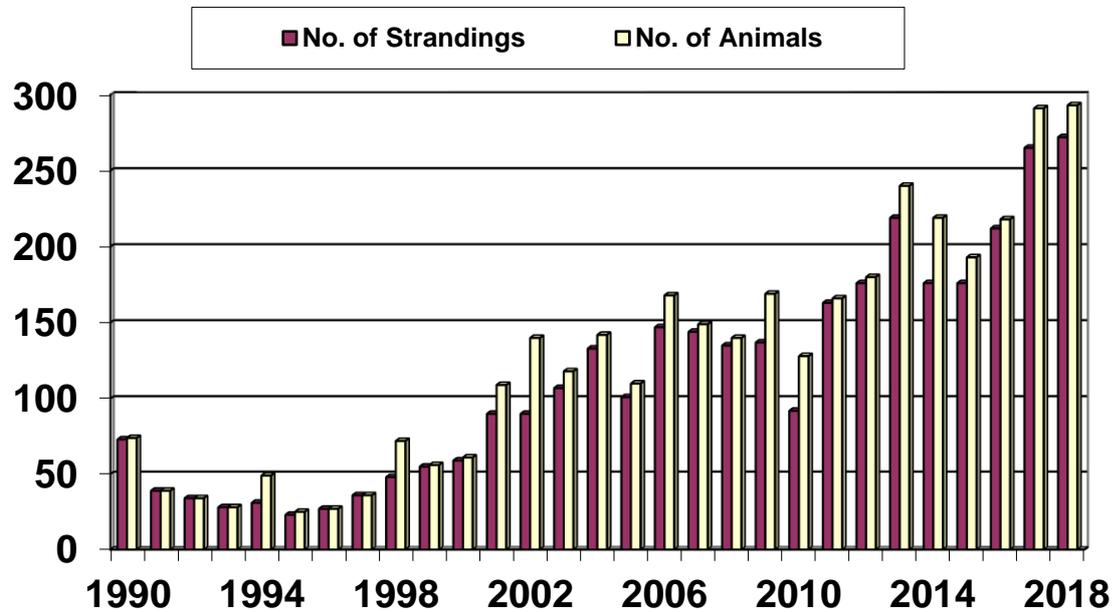
We spent considerable time during 2018 working with our software developer to improve our current website's reporting functions and in particular the front end, with which the public interface. The impact of new social media platforms such as Facebook, Twitter and Instagram on recording schemes is also an issue. 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 social media 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 improved our ability to validate records to species level, which has improved from an historic 86-87% to 91%.

So, while the Sighting Scheme remains the countries only repository for validated cetacean sighting records, the state agencies responsible for protecting our wildlife and habitats should not assume that biological recording schemes which underpin a lot of conservation and research will continue at this level run year after year without any support. Goodwill, Citizen Science and considerable volunteer effort will not be enough, and a critical review of this and the stranding scheme is required.

We'd like to take this opportunity to thank all our members for reporting their casual sightings to us, and to those hard-core effort watchers who put in so much dedicated time. You have our respect and appreciation.

CETACEAN STRANDINGS REVIEW

Numbers of strandings recorded in Ireland have been increasing since 2011 and the highest annual total was recorded in 2018. The three years with the highest number of recorded strandings on the IWDG Cetacean Strandings Database were in 2018 (n=272), 2017 (n=265) and 2013 (n=219). Recorded strandings in recent years are around double the numbers from years prior to 2011.



Total number of strandings and individuals reported to IWDG 1990 – 2018

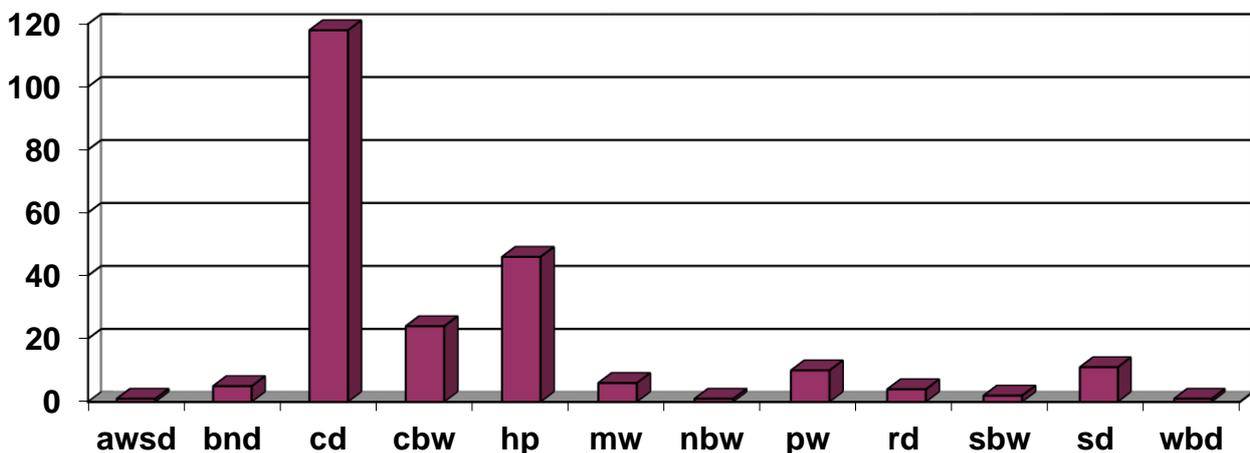
While it is possible that an increase in observer effort may be partly responsible for modern high numbers of strandings, education to increase awareness of reporting strandings to the IWDG has been in place especially since 2000. On average, there were about 3 reports from members of the public per stranding during 2018 with contributions from over 800 individuals. Thanks to mobile phone technology, 97% (n=264) of all records submitted were accompanied by a photograph.



Cuvier's beaked whale, Bloody Foreland, Co. Donegal, 12 September 2018 © Gareth Doherty

During 2018, 12 identifiable cetacean species were recorded in Ireland as follows; Atlantic white-sided dolphin (n=1), Bottlenose dolphin (n=5), Common dolphin (n=118), Cuvier's beaked whale (n=24), Harbour porpoise (n=46), Minke whale (n=6), Northern bottlenose whale (n=1), Pilot whale (n=10), Risso's dolphin (n=4), Sowerby's beaked whale (n=2), Striped dolphin (n=11) and White-beaked dolphin (n=1). Strandings of Common dolphins have been particularly high since 2011 and this one species is the main driver for the total increase in all strandings.

2018 saw the highest annual total for this species with 118 records accounting for 43% of all identifiable species recorded. A highly unusual number of Cuvier's beaked whale carcasses were washed ashore in Ireland during 2018 with 24 recorded. Most of these were reported over a few weeks during August and September and at the same time, large numbers were also reported stranded in Scotland. In a 'normal' year, 0 – 4 strandings of Cuvier's beaked whales would be recorded in Ireland. There are a total of 98 records for this species on the IWDG Cetacean Strandings Database so it is remarkable that almost one quarter of all these records were received during August and September 2018.



Strandings by species recorded in Ireland during 2018

The Stranding Scheme was part-funded during 2018 by the National Parks and Wildlife Service of the Department of Culture, Heritage and the Gaeltacht. As part of this funding, details of these strandings were forwarded to the National Biodiversity Data Centre for inclusion in their databases and validated records were sent for publication in the Irish Naturalist's Journal. Where possible, skin tissue samples were also collected and forwarded to the National Museum – Irish Natural History. We would like to thank the Department of Culture, Heritage and the Gaeltacht for their support in funding this scheme.

Post-mortem of stranded dolphins

The IWDG are delighted that a pilot post-mortem programme was initiated by the Marine Institute and National Parks and Wildlife Service in 2017. The programme involves recovery of a selected number of dolphins. The IWDG have been requesting such a programme for the past 20 years and we were asked to support this crucial project. Further details on the project can be found in the IWDG Consulting, Necropsy section of this report.

CONSERVATION

The IWDG was established to improve the conservation status and prospects of whales, dolphins and porpoise in Irish waters. To achieve that it needed to improve knowledge of their distribution and abundance in Irish waters and identify important habitats and periods and identify threats and pressures. The IWDG has the most comprehensive database on Irish cetaceans and linking this knowledge with conservation actions is the basis of good conservation.

Impacts of Fishing

While fishing activity is considered the largest threat to small cetaceans (dolphins and porpoise) worldwide the IWDG have become every concerned about unsustainable fishing practices including removal of potentially important prey species.

Removal of sprat

IWDG raised concerns over the presence of pair trawling in the Lower River Shannon SAC, which is a protected site for bottlenose dolphins. The IWDG also raised concerns about unregulated fishing on sprat which are a non-quota species, as the removal of this forage fish could have significant effects on whales, dolphins and porpoise that are likely to feed on this energy rich species.

The IWDG contributed a length submission to the consultation on restricting trawling within the 6nmls from the coast. The IWDG welcomed the announcement from Minister Creed just before Christmas that vessels >18m in length will be restricted from fishing within 6nmls from the coast and baseline. The IWDG submission supported the proposed restrictions and also called for a moratorium on sprat fishing until quotas informed by robust science were put in place. IWDG also called for a restriction on all trawling in SACs with dolphins and porpoise as qualifying interests until proper studies on the ecological effect of the removal of large amounts of prey species was carried out.

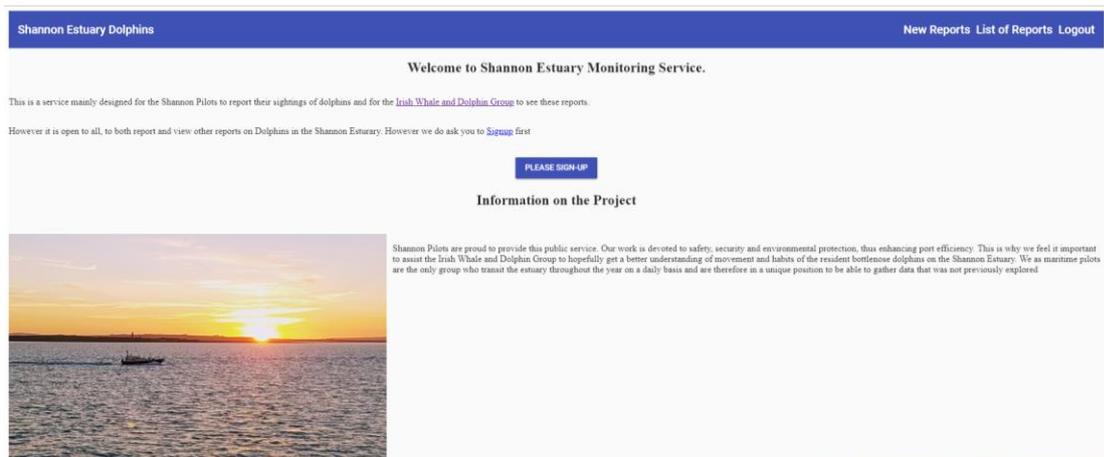


This decision is not only good for marine ecosystems, including whales and dolphins, but also for coastal communities. With proper management, these fish resources can support both fishing communities and marine ecology, and this decision will contribute to building inshore stocks to healthy levels and provide some ownership back to local coastal communities.

The IWDG in their submission proposed a moratorium on all sprat fishing both inside and outside the 6nml limit and baseline, until a management plan for this species was put in place. This has not been implemented, and IWDG are concerned that sprat could be targeted more in 2019 and with no quota restrictions, resulting in a huge impact on this very valuable prey species.

Shannon Pilots Dolphin Monitoring Project

A new initiative by Paddy Galvin saw the creation of an online recording scheme for bottlenose dolphins in the Shannon Estuary. Paddy states *“Shannon Pilots are proud to provide this service. Our work is devoted to safety, security and environmental protection, thus enhancing port efficiency. This is why we feel it important to assist the Irish Whale and Dolphin Group to hopefully get a better understanding of movement and habits of the resident bottlenose dolphins on the Shannon Estuary. We as maritime pilots are the only group who transit the estuary throughout the year on a daily basis and are therefore in a unique position to be able to gather data that was not previously explored”*.



CETACEANS IN THE CELTIC SEA

IWDG Science Officer Seán O'Callaghan reports from RV Celtic Explorer after the third and final week of the annual Celtic Sea Herring Acoustic Fisheries Survey. This is the 15th consecutive year the IWDG have conducted a cetacean survey using this research platform which estimates the biomass of herring for stock assessments. It is one of the longest datasets collected in Ireland to explore predator-prey relationships, explore changes in distribution and abundance and assess predator requirements to input into fishery models.



Trawlers and fin whales together during Celtic Sea herring Survey © Seán O'Callaghan

IWDG are still represented on the Celtic Sea Herring Management Advisory Committee and this survey provides good information on the presence and importance of herring and sprat to whales and dolphins.

WELFARE

The biggest stranding story of the year was the huge number of strandings of Cuvier's Beaked Whales, the largest Unusual Mortality Event (UME) of this species worldwide. The IWDG were the first to report this UME which was mirrored in Scotland and in Iceland. We know very little about any species of beaked whale in the NE Atlantic, but what we do know is that they are not abundant and this mortality could be of conservation concern and not just a welfare issue.

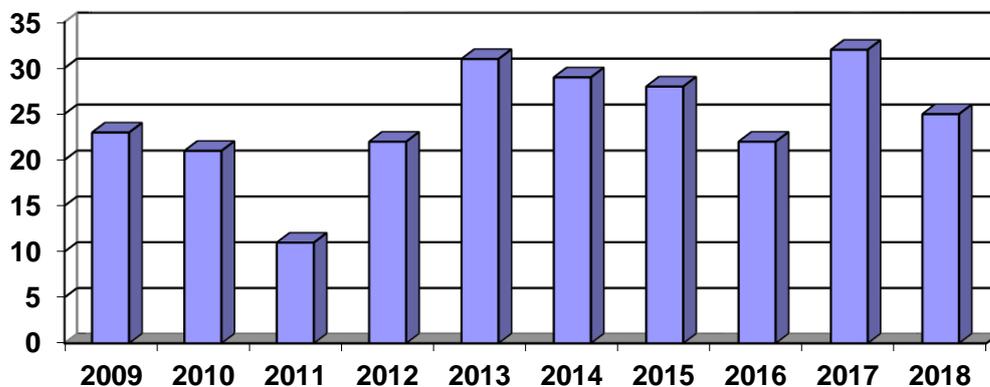
The Irish government is providing support to the UK investigation and IWDG have supplied the few tissue samples we have from four stranded beaked whales to the Natural History Museum of Denmark, Section for Evolutionary Genomics at the University of Copenhagen in Denmark who host the largest collection of beaked whales samples in Europe to explore if the stranded whales were related and could have been affected at the same time, The IWDG will also provide data for drift modelling to explore the offshore origin of these carcasses in Ireland and Scotland.

Live Strandings

Live stranding whale and dolphins represent only c.10% of all strandings but they attract far more publicity and media attention. IWDG is a conservation charity rather than a welfare one and does not have the resources to actively handle live strandings around the Irish coast. Where possible, IWDG offers advice by phone/email and



occasional live stranding training courses when requested. On occasion, local members may be in a position to assist on site. During 2018, 25 live strandings were recorded in Ireland, which is consistent with a 10-year average of 24.4 live strandings per annum (see below).



Publications and Meetings

The welfare of stranded cetaceans lies at the core of IWDG Welfare policy. The IWDG published a Welfare Policy Document in 2016 and has been circulated to members, government and relevant stakeholders in 2017. This policy covers a wide range of welfare issues from fisheries bycatch, entanglement, disturbance including through whale watching and live strandings. Live strandings are not uncommon with between 20-30 events reported each year. To assist in developing an effective and co-ordinated approach, the IWDG revised and published '*Face to Face with a Beached Whale*', the IWDG's Live Stranding Policy and procedure, which encompasses research with international partners and international best practice.

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. Examples of some of the main research projects carried out are presented below.

Offshore Surveys

IWDG continued to collect offshore data to inform our offshore policies. We place researchers onto three ferry routes crossing the Irish Sea on a monthly basis. We also use the state research vessel RV Celtic Explorer when the opportunity arises. In 2018, we carried out the 15th consecutive year of recording cetaceans on the Celtic Sea in October to maintain our time series.



Fin whale lunge feeding at the surface © Andrea Farinas/IWDG

Large Whale Project



Sightings of individual humpback whales continued to be high during 2018, while records of fin whales inshore continued to decline. The Large Whale Project got a great boost with funding from Ryanair for the WhaleTrack Ireland Project.

During 2018 a small number of surveys were carried out off west Kerry but mainly funds were used to purchase equipment for the 2019 season.



Humpback whales off West Kerry photographed during WhaleTrack Ireland © Nick Massett/IWDG

Bottlenose Dolphin Photo-id Catalogue

The IWDG continued to collect and database images from bottlenose dolphins from around the Irish coast. The number of images submitted to the IWDG is now such that we have organised them onto IMatch and Finbase software to enable easy and rapid access to inform research and conservation needs.

Shannon Dolphin Project



During 2018 the Shannon Dolphin Project was severely constrained by a lack of useable boat as the IWDG engine on *Muc Mhara* was proving unreliable. IWDG continued to place research assistants on commercial dolphin watching vessels from Kilrush and Carrigaholt.

These images and associated data are also have organised them onto IMatch and Finbase software.

IWDG continued with its long term Static Acoustic Monitoring at four sites in the Shannon Estuary with support from the EPA.

Ireland to Iceland 2018



The IWDG research vessel *Celtic Mist* sailed to Iceland between May and June 2018 and spent a month exploring Icelandic waters, aiming to locate humpback whales and other cetacean species to obtain more photo-identification images. The aim was also to build a strong relationship with researchers in government and universities, including the Icelandic Marine and Freshwater Research Institute and the University of Iceland. During the month-long navigation of Iceland's west, north and east coasts, we visited coastal communities to promote links and collaboration as well as our shared responsibility of humpback whale conservation and management.

There were a total of 94 sightings of at least thirteen species of cetacean identified to species level. Humpback whales were the most frequently recorded species in Iceland, followed by minke whale and white-beaked dolphin. Single sightings of sperm whale and northern bottlenose whale were also made.



Blue whale mother Skjálfandi Bay © Joanne O'Brien /IWDG

Out of the 55 photo identified humpback whales, seven were known individuals having previously been recorded in Iceland. One animal, #23 whom we photographed near Húsavík on June 23, is a match with our HBIRL25, recorded by Nick Massett off the Blasket Islands in County Kerry on both the 14th and 25th September 2013. The same year this individual was photographed off Húsavík on 28 July, a 48 day interval between Húsavík in northern Iceland and Kerry in Southwest Ireland.



Five humpback whales, Skjálfandi Bay, near Húsavík, June 23rd 2018 © Pádraig Whooley/IWDG

PUBLICATIONS INVOLVING IWDG

Baker, I., O'Brien, J., McHugh, K. and Berrow, S. (2018) Female reproductive parameters and population demographics of bottlenose dolphins (*Tursiops truncatus*) in the Shannon Estuary, Ireland. *Marine Biology* 165:15 <https://doi.org/10.1007/s00227-017-3265-z>

Berrow, S., Meade, R., Marrinan, M., McKeogh, E. and O'Brien, J., (2018) First confirmed sighting of Sowerby's beaked whale (*Mesoplodon bidens* (Sowerby, 1804)) with calves in the Northeast Atlantic. *Marine Biodiversity Records* 11(1) DOI: 10.1186/s41200-018-0154-1

Kowarski, K., Delarue, J., Martin, B., O'Brien, J., Meade, R., Ó Cadhla, O. and Berrow, S. (2018) Signals from the deep: Spatial and temporal acoustic occurrence of beaked whales off western Ireland. *PLoS ONE* 13(6) DOI: 10.1371/journal.pone.0199431

O'Connell, M. and Berrow, S. (2018b) Records from the Irish Whale and Dolphin Group for 2016. *Irish Naturalists' Journal* 36(1): 75-81.

O'Connell, M. and Berrow, S. (2018a) Records from the Irish Whale and Dolphin Group for 2015. *Irish Naturalists' Journal* 36(1): 68-74.



Celtic Mist in the Shannon Estuary on passage from Galway with bottlenose dolphins © Frances Gallagher

EDUCATION AND OUTREACH

The IWDG's education and outreach programme continued to grow in 2017, through contacting members via ezine; conducting talks around the country; outreach at public events; hosting whale and dolphin identification and strandings workshops; land and boat-based whale watches; and conducting outreach and education with schools and corporates. Key highlights included:

Whale Watch Ireland

On Saturday, 26th August, the IWDG hosted Whale Watch Ireland 2018, the IWDG's flagship outreach event, which is sponsored by Inis. This All-Ireland Whale Watch day comprised free, guided whale watches at 20 sites throughout the country. Now in its 18th consecutive year, WhaleWatch Ireland was attended by around 1000 people at 19 sites, and produced sightings at 73% of sites.

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. The event is held during Heritage Week to maximise impact and attract as wide an audience as possible. For many attending, it was their first encounter with a cetacean in the wild in Irish waters.



WhaleWatch Ireland at Loop Head, Co Clare © Frances Bermingham

Attendees at sites were provided with interpretation by IWDG personnel, who have vast experience regarding cetaceans and their ecology, biology and the conservation threats facing these marine mammals. An assortment of whale artefacts were also on view at some sites, and handouts and information sheets were supplied.

Due to calm seas and clear skies, sightings were observed at an impressive 75% of the 20 sites covered. In total, six species of cetacean were observed: humpback whales, minke whales, common dolphins, bottlenose dolphins, Risso's dolphins and harbour porpoises plus other marine megafauna: blue fin tuna, ocean sunfish and grey seals.

From all of us in IWDG, we extend a huge thanks to all the dedicated whale watchers who volunteered their time and energy and our core sponsors, Inis, for once again making this wonderful day possible (www.inisfragrance.com).

Outreach at public events

As well as Whale Watch Day and National Biodiversity Week, the IWDG attended several national events, including: World Oceans Day at the Galway Atlantaquaria; Go Wild in Galway; Seafest in Galway and the Cruinnai na bhád in Kinvara, Co Galway with Celtic Mist.



Cruinnai na bhád in Kinvara, Co Galway © Simon Berrow

At each event, the biology, ecology, range of species and places to see whales and dolphins in Ireland was promoted, along with how members of the public can get involved with IWDG recording schemes. A range of biofacts, such as skulls, teeth and baleen were on display at each event, as well as posters and literature for distribution. There was an estimated reach of nearly 3,000 people across all events.



Spróí by the Sea, Doonbeg, Co Clare © Simon Berrow

National Biodiversity Week

As part of National Biodiversity week the IWDG hosted five land-based whale watches were conducted in Clare and Cork; whale and dolphin talks were given to members of the public in Clare.

Outreach with businesses

As part of its corporate programme, the IWDG delivered 8 boat-based surveys in West Cork with volunteers from Apple Computer in Cork, who all received instruction on whale and dolphin species identification and recording and reporting procedures. We also collaborated with marine tourism operators to ensure best practice, sustainability and continuity to recording schemes.

If your organisation would like to find out more about how we can assist with your corporate social responsibility programmes, please don't hesitate to get in touch.

Marine Education and Training

The IWDG conducted numerous talks and marine education workshops for schools, youth groups and members of the public around the country. Workshops on the identification and recording of whales and dolphins were also hosted in conjunction with the National Biodiversity Data Centre, Local Authorities and IWDG local groups.

Our programme of training for those hoping to work as a professional Marine Mammal Observer in industry also continued and we delivered one Joint Nature Conservation Committee (JNCC) and Irish mitigation guidelines courses as well as a Protected Species Observer (PSO) course.



NBDC Workshop at the Shannon Dolphin Centre © Frances Bermingham

CELTIC MIST

Celtic Mist underwent a major refit during winter 2017/18. She lay in Grand Canal dock in Dublin courtesy of Waterways Ireland. A huge voluntary effort was put in by IWDG members and Glen Nua under the watchful eyes of Fiacc O’Brolchain and Mick O’Meara. As well as refitting the vessel with new Chartplotter, Autohelm and long-range radio, painting, scarping, woodwork and a complete overhaul of the inside and out – Iceland Ready !



Celtic Mist in Grand Canal Dock, Dublin © Simon Berrow

Ireland Ready – as Celtic Mist embarked on its longest journey to date; a 4500km round journey from Dublin to Reykavík, around the north coast of Iceland and returning to Derry via the Faroes and the Outer Hebrides.

Once in Derry she spent a week travelling to Galway 2 weeks in Fenit before the final 2 week passage to Dublin, a hugely successful year.

COMMUNICATIONS

IWDG's high media profile continued in 2017. There was an intense communications campaign on social media and interviews on TV3 news, local radio and copy in local papers regarding the IWDG's concern over pair trawling. The IWDG also attracted good coverage, including a slot on RTÉ's Six One news over the IWDG's concern of the recording stranding numbers and the need for post mortem examinations.



Humpback whale off west Kerry © Nick Massett

The IWDG's Chief Science Officer now has a monthly slot on *This Island Nation* (broadcast digitally on-line and syndicated to local stations nationwide), as well as a monthly piece in the marine industry publication, *The Marine Times*. IWDG contribute to RTÉ radio's the *Mooney Goes Wild Show* as well as Morning Ireland, Newstalk and Today FM featuring IWDG Conservation policies. Local radio is really important and IWDG are regularly contacted and interviewed.

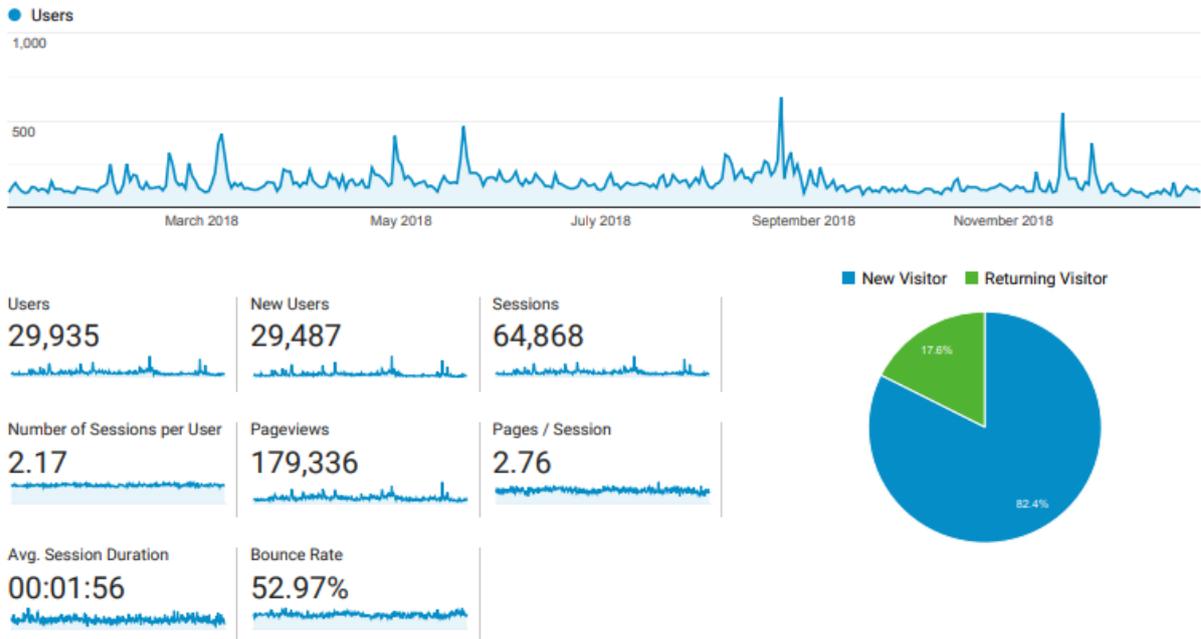
Throughout 2018, the group has increased its presence on Facebook by setting up pages for its local groups and varying the range of posts on both our Facebook and Twitter profiles to raise our public profile and link traffic back to the IWDG website.

Website Analytics

Website analytics data from 2017 show that in total, the site attracted 179,336 page hits (views), 64,868 visits (sessions), which was similar to 2017 of which 29,935 of these were unique visitors (users), with 29,487 being new visitors (users). Traffic to the site was at a steady rate of c.3,500 visitors for the first half of the year, with peaks associated with large events such as WhaleWatch Ireland in August. Each visitor viewed 2.76 pages per visit on average, and remained on the site for c. 2 mins per visit.

While the analytics show an overall increase of visits to the site, the lack of retention of the same visitors compared to 2017, which needs addressing. Although the IWDG's website was overhauled in 2015/2016, the current website needs significant development to improve cetacean reporting functions, data extraction, and the general end-user experience. In feedback from our members, there is a notable absence of some of the functions that the former IWDG website contained, which is impacting on people's interest in reporting and viewing the site.

Therefore, for 2019, we are making changes to the site as a matter of priority to resolve these issues and improve the site for our members and as an information resource.



IWDG Consulting



The IWDG provides consulting services to utilise its experience and knowledge of whales and dolphins in Ireland. We feel we are best placed to deliver marine mammal mitigation, provide marine mammal risk assessments using latest sightings data and to carry out Environmental Impact Assessments. Our team of qualified and experienced people provide MMO services as well as dedicated visual and acoustic surveys. Overheads from IWDG Consulting are a very important source of income to the IWDG to support our recording schemes and research.

During 2018, the IWDG continued to grow its consulting wing. IWDG Consulting have a full time marine mammal ecologist working on delivery of the Marine Mammal Mitigation plan for Dublin Port as well as providing MMO Services to a range of clients such as RPS L&M Keating and Malachy Walsh and a Spatial Planning contract with ABP Mer. We also carried out several Environmental Impact and Appropriate Assessments and Marine Mammal Risk Assessments for RPS, Malachy Walsh and as well as several local authorities, including Fingal, Wexford and Waterford.



IWDG were involved in a number of large projects including ObSERVE-Acoustic funded by the DCECC, NPWS. IWDG also won in collaboration with Cork RVL and GMIT a contract from the Marine Institute to provide sampling and necropsy services including recovery of dolphins and porpoise for post-mortem (project detailed below).

This consultancy enables IWDG to support highly professional and qualified consultants to provide their services to the IWDG. For further information see: <http://consulting.iwdg.ie/>

Necropsy of Stranded Cetaceans Project

Once again, the IWDG won the tender put forth by the Marine Institute and the National Parks and Wildlife Service to carry out a dolphin and porpoise post-mortem scheme in 2018. This project, delivered in collaboration with the Regional Veterinary Laboratories of the Department of Agriculture (RVL) and the Galway-Mayo Institute of Technology (GMIT), uses the IWDG's existing stranding scheme to investigate the cause of death of stranded striped and common dolphins, and harbour porpoises.

In 2018, 30 porpoises and dolphins were recovered and necropsied by Jim O'Donovan of Cork RVL, with assistance from IWDG biologist Mags Daly. IWDG would like to extend a huge thanks to all those who reported stranded animals and assisted with the loading and delivery of carcasses to the vet lab in Cork City. This scheme would not be possible without these dedicated members of the public. The Marine Institute will release a report of necropsy results in due course which will be made available to the public.

As we continue the scheme into 2019, we would like to remind our members that if you see any stranded whale, dolphin or porpoise to please submit your record online to the IWDG. If possible and safe to do so, we would ask members who report strandings of target species to secure the animal above the high water mark and send the coordinator a GPS location and photograph of the animal as a whole, as well as close up photos of the tail fluke, dorsal and pectoral fins.

Together, we can try to gain insight into what causes animals to strand, and if possible, try to reduce these increasingly high stranding numbers - especially with regards to the common dolphin.



Necropsy of a Sowerby's beaked whale © Simon Berrow

LOOKING FORWARD

In our 2018 Annual report, we report that the IWDG is in a good position to consolidate its activities over the next three years. During the year we have worked on improving our structure, governance, membership administration and financial administration, as well as starting to develop strategies for communication plan; improving the reporting function on our website; maintaining our research vessel, the Celtic Mist; increasing our understanding of Irish cetacean migration by undertaking research in Iceland; as well as increasing research output by tendering for more consultancy work.

FUNDING

The full set of audited accounts for 2018 and previous years are available on our website: www.iwdg.ie. 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 2018, the IWDG received funding and support from:



Roinn Cumarsáide, Gníomhaithe
ar son na hAeráide & Comhshaoil
Department of Communications,
Climate Action & Environment

We are members of and funded by



Irish Environmental Network



An Roinn
Cultúir, Oidhreachta agus Gaeltachta
Department of
Culture, Heritage and the Gaeltacht



An Roinn
Talmhaíochta,
Bia agus Mara
Department of
Agriculture,
Food and the Marine



Marine Institute
Foras na Mara



National Park &
Wildlife Service