

For members of the Sea Watch Foundation

Issue 4 Spring 2021





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Editorial



Welcome to Sea Watcher

- the magazine exclusively for you, our members.

Easter has arrived, the sun is shining, the sea is calm outside my house, and I'm hoping that spring has truly arrived. Here in Wales, for the first time in months, we are allowed to travel more than five miles from home, and soon we can travel even between Wales and England if we so wish (but not yet into Scotland). I am itching to get out to sea to conduct surveys, and we are hoping that sometime next month we can open our field office and resume cetacean monitoring within Cardigan Bay. We are keeping our fingers crossed that there are no further waves of coronavirus, and that as summer progresses, we may be able to return to some semblance of normality.

As we move into early summer, we tend to get increased numbers of sightings of killer whales or orca around north Scotland, some of these exploiting the aggregations of harbour seals at the start of their breeding season, so this issue is orcathemed. Our fact file focuses on orca around the UK, and Robin Petch, our Sea Watch ambassador, tells us about the orcas of British Columbia. And we look forward to our annual Orca Watch event, which this year will be largely online. You can find out more about our plans on page 32.

Two years ago, I had planned to travel to Svalbard in the Barents Sea but Covid-19 put paid to that. I have long wanted to see walruses in their natural habitat. As it happens, a walrus has decided instead to come and see us in Wales. As I write, it has been lazing about on a pier in South Wales. You can read, later in this issue, about its wanderings and possible reasons for why, despite climate warming, we see some visitors from the arctic.

Martin Kitching, regional coordinator for North East England, shares his local hotspots, where whitebeaked dolphins have become scarcer inshore whilst bottlenose dolphins have markedly increased. And we profile Karen Hall, Regional Coordinator for Shetland, who describes her life in the Northern Isles where breakfast can be interrupted by a humpback whale seen out of the window, pods of orca can be seen any time of year, and large groups of pelagic species such as Atlantic white-sided dolphin and long-finned pilot whale may swim far up the long narrow voes.

We also hear from Rob Lott about the career path he took from early days with us in New Quay to being employed by Whale & Dolphin Conservation, campaigning against whales and dolphins being held in captivity.

Travelling further afield, Edda Elisabet Magnusdóttir describes Iceland's whale watching hotspot of Húsavik in the north-east, where blue whales mingle with humpbacks. In the other direction, Alexandra Teles of Espaço Talassa takes us on a survey of the whales and dolphins of the waters around Pico in the Azores. With one of the most diverse cetacean faunas in the world, this is among the best spots in the North Atlantic to see Sowerby's beaked whale.

Back in the UK, our Sightings Officer, Chiara Giulia Bertulli presents the full results of last year's National Whale & Dolphin Watch and, looking to the future, we provide a guide to how to conduct surveys from a vessel.

As summer approaches and with it, hopefully, greater opportunities to visit the coast and go to sea, we look forward to the prospect of an everincreasing number of sightings around the British Isles from our observer network, along with the collection of data from dedicated surveys from land and sea that are so important in supporting the monitoring of Britain's cetacean populations leading to better conservation.

Thank you again so much for all your support. Happy Easter!

Peter Emons

Dr Peter G.H. Evans, Director, Sea Watch Foundation



UK Hotspots: The Farne Islands (Northumberland)

Martin Kitching, Sea Watch Regional Coordinator for North East England, tells us about his local UK Hotspots.

Living 15 miles north of Newcastle upon Tyne and just 3 miles, as the crow flies, from the North Sea, I'm blessed with lots of great cetacean watching opportunities close to home. Tynemouth. Whitley Bay, Seaton Sluice, Newbiggin, and Cresswell are a short drive away and I visit all of them regularly. A little bit further afield, but still less than an hour's driving time, is Seahouses, gateway to the Farne Islands.



There are somewhere between 14 and 30 islands, depending on the state of the tide, split into two main groups. The islands are outcrops of columns of igneous dolerite, left behind by a combination of erosion and rising sea levels after the last ice age.

Steep vertical cliffs are whitewashed by guano from the extraordinary breeding colonies of hundreds of thousands of seabirds that make the islands their home during the late spring and summer. Puffin, guillemot, razorbill, kittiwake, fulmar, shag, cormorant and three, sometimes, four, species of tern all nest here and feed in the food-rich waters surrounding the islands and further afield in the Northumberland Marine Special Protection Area.

The islands also offer a spectacular view towards the mainland, with the bulk of the Cheviot massif dominating the skyline, the hills of south east Scotland away to the north west and the gaunt ruin of Dunstanburgh castle to the south.



Seabirds on Staple Island. Photo copyright: northernexperiencepelagics.co.uk

Bottlenose dolphins are frequently seen between the mainland and the islands from April to September, although more recently they have been seen somewhere along the coast of north east England all year round. This was a scarce species here until October 2012 when c. 150 dolphins, presumably all part of the east coast Scotland population, passed by Seahouses harbour entrance over the course of 90 minutes. Since then, distribution and abundance have increased dramatically and they regularly bow-ride the boats travelling across to the islands.



Bottlenose dolphin off Seahouses. Photo copyright: northernexperiencepelagics.co.uk

Harbour porpoise are sometimes seen from the regular boat trips that operate between Seahouses harbour and the islands, but changes in the distribution of other cetaceans seem to be having an impact on sightings now.

Bottlenose dolphin and harbour porpoise can also be seen between the mainland and the islands from onshore locations. Stag Rock, near the entrance to Bamburgh golf course, and Beadnell, just to the south of Seahouses, are always worth a few hours of one's time.

Minke whales can be seen close to the islands in some years, mainly between July and September – we found at least six individuals within a few miles of the islands in September 2012 but their distribution is very much dependent on food availability and there are some years when they are very scarce.



Minke whale near Inner Farne. Photo copyright: northernexperiencepelagics.co.uk



White-beaked dolphin in the Farne Deeps. Photo copyright: northernexperiencepelagics.co.uk

White-beaked dolphin was a regular sight for the National Trust rangers on the islands until 2010, but there have been relatively few sightings since then. Transect surveys that I've carried out for the North East Cetacean Project since 2009, and the groundbreaking commercial pelagic tours that I've taken there since 2010 for Northern Experience Pelagics, have demonstrated that they are much more reliable out in the Farne Deeps between July and October, well offshore and away to the south east of the islands.

Risso's dolphin and humpback whale have occurred near the islands in the last decade but are very scarce. Killer whale or Orca is incredibly rare along the Northumberland coast and it is surprising they do not appear to have discovered, and exploited,

the colony of 3,-4,000 grey seals that live around the islands, although many years ago a pod would visit the Farnes on an annual basis.

I am privileged to spend a lot of time around the north Northumberland coast and the islands, myself leading photography workshops for Northern Experience (<u>www.newtltd.co.uk</u>), but it does mean that I've had to add a bigger hard drive to my computer to store the dolphin images! If you take a trip that lands on the islands, there is a landing fee payable to the National Trust too – if you are already a member, then take your membership card with you to avoid having to pay that. The only thing you'll value more than your membership card is a hat to protect you from the arctic terns. You have been warned!

Boat operators to the Farne Islands

The Farne Islands should really be on everyone's bucket list. There are two boat operators in Seahouses who have been invaluable in assisting the North East Cetacean Project with identifying individual dolphins over the last eight years and I would happily recommend either of them; Serenity Farne Island Boat Tours (farneislandstours.co.uk) and Billy Shiel's Farne Island Boat Trips (www.farne-islands.com). You will get an entertaining tour with knowledgeable crew and hear about the wildlife and history of the islands including the heroic tale of Grace Darling and the rescue of survivors from the wreck of the "Forfarshire".

Further Reading

Bond, I. (editor), (2012) Mammals, amphibians and reptiles of the North East. *Northumbrian Naturalist, 73*. Lunn, A. (2004) Northumberland. *Collins New Naturalist,* London.

Species Fact File: Killer Whale



At a glance...

Scientific name – Orcinus Orca Length – 2.08 - 2.60 m (newborn) Up to 8.5 m (female) 9.8 m (male)

Weight - c 160-180 kg (newborn) Up to 7,500 kg (female) 10,000 kg (male)

Markings – black on the back and sides, with a white belly extending as a backwards-pointing lobe up the flanks and less markedly around the throat, chin and undersides of the flippers. There is a white oval patch above and behind the eye, and a less distinct grey saddle on the back behind the dorsal fin, which shows up clearly when the animal surfaces.

Behaviour – spy-hopping, fluke slapping, breaching (especially juveniles)

Diet – highly variable, includes a wide range of fish, also squid, rays, marine mammals.

IUCN status - Data Deficient

Key ID features

At Sea

It is the largest of the dolphin species, with a distinct black & white coloration. It has a black back and flanks with a white oval eye patch and grey saddle behind dorsal fin and white underparts. Its dorsal fin is very tall, particularly in adult males.

On Land

Its general form is robust. Its teeth are large (up to 2.5 cm in diameter) and conical, oval in cross section. It has a total tooth count of 20-28 in each jaw.

In detail

The killer whale or orca is a robust medium sized whale – the largest member of the family Delphinidae. Adult male killer whales are about 25% larger than adult females with a tall (>2 m) sometimes forwards leaning, erect triangular dorsal fin. Immature animals and adult females have a smaller (c. 0.9 m), more recurved dorsal fin. Adult females are almost indistinguishable from immature males.

The colouration is very striking - black on the back and sides, with a white belly extending as a backwards-pointing lobe up the flanks and less markedly around the throat, chin and undersides of the flippers. There is a white oval patch above and behind the eye, and a less distinct grey saddle on the back behind the dorsal fin, which shows up clearly when the animal surfaces.

The head is conical-shaped, with a black upper jaw and white lower jaw. Its beak is indistinct, while its mouthline has a slight downward curve towards the corner of the gape.

The species has large paddle-shaped flippers, and broad tail flukes with white undersides and a straight or slightly convex trailing edge and tips that particularly in adult males may curl down.

Two forms are described in the North Atlantic, one smaller (to 6.6 m length), with a parallel eye patch, that feeds mainly upon fish, and the other larger (to 8.4 m), with an eye patch that slants downward in the rear, and feeds more upon marine mammals (although the latter is based upon a small sample size).

Range and habitat

The killer whale has a cosmopolitan distribution but is known primarily to inhabit cold temperate and polar seas. Its global distribution almost certainly exceeds that of all other cetacean species. Several distinct geographical forms are described around the world, some with overlapping ranges.

Found in a wide variety of habitats, it is common in cold, nearshore waters but is also reported all the way from the polar ice caps to tropical oceanic islands.

Abundance

The population size of killer whales in the North Atlantic is unknown but wide-scale abundance surveys in the central and eastern parts of the northern North Atlantic in 2005 indicated an abundance of around 30,000 individuals. From the North Atlantic Sightings Survey (NASS) in 2001, it was estimated that there were around 15,000 killer whales in the North Atlantic between the Faroe Islands and Canada. From the 2014-2018 Norwegian surveys (covering southern Norway, the northern North Sea, and the Barents Sea), around 14,000 killer whales were estimated in this area.

European distribution

Although widely distributed in the North Atlantic, extending south to regions such as the Caribbean, Azores, Madeira, Canaries and the western end of the Mediterranean, killer whales in coastal northern European waters are most commonly found off Iceland, western Norway and the Faroe Islands. Further east, they only occasionally enter Danish waters and the Baltic Sea. The species is rare south of the British Isles although a small population of around forty animals inhabits the Strait of Gibraltar.

UK & Ireland

In British and Irish waters, killer whales are most frequently seen in northern and western Scotland and western Ireland; they are rare in the Irish Sea, central & southern North Sea and English Channel.

Although most often seen in coastal waters during the summer months (May-September), they have been recorded in all months of the year, and in North Scotland, now show no strong seasonal peak. The pods regularly visiting coastal regions of northern Britain appear to be quite small, although the Scottish photo-ID catalogue now numbers around 150 individuals. Photo-identification of individuals indicate that these are linked to the northern community of killer whales that follow the Icelandic summer-spawning herring and range widely between Iceland, the Faroes and northern Britain, and are separate from the small (<10) pod forming the west coast community that inhabits shelf waters largely to the west of Britain (from the Hebrides south to western Ireland and the Irish Sea).

Photo-ID has recorded links between Iceland, Faroes and Scotland for at least 20 animals belonging to the Northern Isles community. In addition, large groups of the offshore community are often associated with trawlers fishing for herring or mackerel. There are no recorded links in recent years between orcas seen around Scottish shores and those in Norway.



Overall Distribution of Killer Whale around British Isles (Source: Waggitt et al., 2020)



Killer Whale sightings around British Isles (Source: Evans & Waggitt, 2020)

Diet

Killer whales have a highly variable diet due to a wide variety of foraging methods used. The diet includes fish such as herring, mackerel, salmon, cod, halibut, but also squid, rays, marine mammals, and occasionally turtles and birds.

There may be some specialism towards a diet of marine mammals or a diet largely of fish.

Behaviour

The ecological specialisations of killer whales are associated with highly divergent lifestyles among populations, including differences in social structure, foraging behaviour, and the use of underwater sound. Sightings around the British Isles are mainly of single individuals or small groups of <15 animals, and typically <10. Groups of 100-300 have been sighted in the northern North Sea and east of Shetland, associated with trawling activity. Groups are often matriarchal where the base unit is a mother with their calves.

Life history

Most life history information comes from photoidentification studies in British Columbia and Alaska. Sexual maturity is reached at eight to ten years in females and 15-16 years in males. It is suggested that mating peaks around October-November and may be associated with offshore movement. The gestation period is 15-18 months.

Calves are nursed for at least 12 months, with weaning probably between one to two years of age. The calving interval is very variable, between two and 14 years.

The maximum life span is 60 years for males and c.90 years for females. Mortality within the first six months of life is estimated at 43%, after which it is very low, with average life expectancy 30 years in males and 50 years in females.

Possible Threats

The main threats to killer whales are the depletion of stocks of favoured prey such as herring and mackerel, and the high levels of man-made contaminants such as PCBs, PBDEs and DDT that exist in the eastern North Atlantic, which may affect their reproductive success. Until recently, killer whales were also regularly hunted in Norwegian, Icelandic and Faroese waters.

The species is legally protected in European, British and Irish waters.

Further Reading

Boran, J.R., Hoelzel, A.R., and Evans, P.G.H. (2008) Killer whale Orcinus orca. Pp. 743-747. In: Mammals of the British Isles. (Eds. S. Harris and D.W. Yalden). Handbook. 4th Edition. The Mammal Society, Southampton. 800pp.

Evans, P.G.H. (2020) Killer whale or Orca Orcinus orca. Pp. 105-108. In: European Whales, Dolphins and Porpoises. Marine Mammal Conservation in Practice. Academic Press, London & San Diego. 306pp.

Evans, P.G.H. and Waggitt, J.J. (2020) Killer whale Orcinus orca. Pp. 162-163. In: Atlas of the Mammals of Great Britain and Northern Ireland (D. Crawley, F. Coomber, L. Kubasiewicz, C. Harrower, P. Evans, J. Waggitt, B. Smith, and F. Mathews, Eds). Published for The Mammal Society by Pelagic Publishing, Exeter. 205pp.

Foote, A.D., Newton, J., Piertney, S.B., Willerslev, E., and Gilbert, M.T. (2009) Ecological morphological and genetic divergence of sympatric North Atlantic killer whale populations. *Molecular Ecology*, 18 (24): 5207-5217.

Ford, J.K.B. (2018) Killer whale Orcinus orca. Pp. 531-537. In: Encyclopaedia of Marine Mammals (B. Würsig, J.G.M. Thewissen, and K.M. Kovacs, Eds). Academic Press, London & San Diego. 1,157pp.

Jefferson, T.A., Webber, M.A., and Pitman, R.L. (2015) Killer whale Orcinus orca. Pp. 186-192. In: Marine Mammals of the World. A Comprehensive Guide to their Identification. Academic Press, London & San Diego. 608pp.

Pike, D.G., Gunnlaugsson, T., Mikkelsen, B., Vikingsson, G., and Desportes, G. (2020) Distribution and Abundance of Killer Whales in the Central North Atlantic, 1987-2015. NAMMCO Scientific Publications, 11. https://doi.org/10.7557/3.5579

Waggitt, J.J., Evans, P.G.H., Andrade, J., Banks, A.N, Boisseau, O., Bolton, M., Bradbury, G., et al. (2020) Distribution maps of cetacean and seabird populations in the North-East Atlantic. Journal of Applied Ecology, 57: 253-269. DOI: 10.1111/1365-2664.13525.



Sea Watching Overseas: Whale Watching from Pico Island, the Azores

Alexandra Teles, Owner of Espaço Talassa, tells us about the cetaceans in her area

Pico island is one of the most diverse spots for cetacean observations in the world. At least twenty-eight cetacean species have been seen in the Azores. It is also a hotspot for several species of sea turtle, bird and fish.



No more than 46.2 km long and 15.8 km wide at its widest point, Pico Island is home to the highest mountain in Portugal, rising to 2,351 metres. It is either six or 17 km away from the other islands in

the triangle of the Azores. A volcano island, formed of lava and spatter cones, mountainous ridge filled with lake craters, dense scrub and forests, it is no wonder that it is called the black island.



A panoramic view of Pico Island

For thirty years, I have been given the opportunity to explore the ocean around Pico. A volcanic island, the land slopes away to many metres depth very close to the shore, making it ideal to observe cetaceans not too distant from land. Observations were started by former whalers' services that were posted in the observation towers. These towers, used by the ancient whalers, were then transformed into look-out posts.

The iconic whales are the sperm whales. They are often sighted close to land, especially from the south coast of Pico. During winter months, groups of young males are reported to cruise the island. However, the majority of the individuals are spotted between April and October.

Groups of females with their calves are often sighted in the area, and the same groups are known to have come to Pico over thirty years ago. Their flukes show signs of hardships such as encounters with predators, driftnets, propellers, parasites, and the mere act of swimming wears away the skin on the fluke of these animals.

Continued observation of identified individuals let us take part in their success observing mothers (e.g. in the presence of calves), and as a close-knit family group. Off Pico, over seven hundred individuals have been recognised to date.



A diving sperm whale

Sea Watching Overseas ... continued

Sperm whales are not the only species to be spotted off the coast of Pico. There are four dolphin species that seem to occur regularly throughout the year, and are, therefore, considered to be resident. These are the common dolphin, striped dolphin, bottlenose dolphin, and Risso's dolphin.



Common dolphins off Sao Joao

A research group has shown that there is a resident population of Risso's dolphins and they can be encountered frequently, close to Ribeiras, socialising during the day, and foraging at dusk. Risso's dolphins feed on cephalopods, just like sperm whales, and it is not uncommon to see them reacting aggressively towards sperm whales that approach their habitat.

Over the past few years, there has been an increase in the sightings of baleen whales, especially blue whales, fin whales, sei whales and humpback whales, migrating through to Azores, encountering food during their migration paths.

Occasionally, the same individual can remain in the area for up to three weeks.



A close encounter with a breaching humpback

Though migration occurs mainly during spring time, these animals are often encountered between March and June.

In the summer months, after the phyto- and zooplankton bloom occurs, the waters are bursting with wildlife, making these waters a perfect habitat for our usual summer visitors, Atlantic spotted dolphins, Sowerby's beaked whales and short-finned pilot whales.



A jumping bottlenose dolphin



A common dolphin with rainbow



A mixed pod of short-finned pilot whales





Lajes do Pico, home of Espaço Talassa

Spotted dolphins with Mt Pico in the background

If this article has got you planning a trip to Pico and the Azores, be sure to factor in time to visit the whale watching base and whaler's museum, in Lajos de Pico, run by Espaço Talassa.

Go to https://www.espacotalassa.com/en/

All photos copyright: Espaço Talassa

The Espaço Talassa base

Alexandra with the Espaço Talassa Team

Skills Clinic: Surveying from a vessel

Sea Watch director, Peter Evans, explains how to conduct an effort-related survey from a vessel.

Most people reporting sightings of cetaceans do so having spotted them from land, either casually or on a dedicated watch from the coast. However, it is self-evident that if you are surveying cetaceans to determine their distribution or abundance, then you must go to sea.

ypically, surveys involve a chartered vessel or plane and follow transect lines that may zigzag across the area or run parallel to one another. For surveys of abundance, they should cover the study area such that in every part the observer has an equal probability of detecting animals. The reason for this is that if more effort is placed in one particular area then inevitably you are more likely to see animals there than in others that are less well surveyed.

Such surveys are usually undertaken on large vessels partly because they provide greater stability and partly because they usually allow observers to be sufficiently high up to watch over a larger expanse of sea. Watches are undertaken continuously but to avoid fatigue, teams are rotated every hour. If surveys are undertaken over an extended period, then it helps to have accommodation on board which also tends to necessitate a larger vessel.

A Sea Watch team on a larger vessel. Photo credit: SWF

When Sea Watch staff undertake dedicated surveys, the team usually comprises six to eight people, one watching in front of the vessel on the port side and another watching in front on the starboard side.

A Sea Watch team on survey. Photo credit: SWF

A third person records effort and we may have a fourth person operating as an independent (called secondary) observer looking far ahead to check whether animals are responding to the vessel. That person is ideally located somewhere else on the vessel so that they are independent of the other two observers (whom we call primary observers). The reason for that is because it is easy to miss animals either because they were under the surface at the time that one scanned the sea, or because they were there but were simply overlooked. From the two sets of observations one can obtain a better estimate of the overall number of animals present at the time. Since you are more likely to spot animals close to the boat than at a distance, it is important to determine how far on either side of the vessel one is able to search accurately. This is often referred to as the effective strip width. It will vary depending upon how high you are from the sea surface (the higher you are, the further you can see), but also depending on the sea state.

We try to survey in as good sea conditions as possible – ideally sea state 2 or less on the Beaufort scale. Above that and one starts to have white horses as the crests of the waves break. At that

point, it becomes much more difficult to spot an animal, particularly if it typically only shows a small part of the body, as tends to be the case with a porpoise or a minke whale.

Our aim is to determine the perpendicular distance of each sighting to the track-line or course of the vessel. This requires measuring the distance to the animal(s) and its angle to the vessel. The latter can be done using a compass or by constructing what is called an angle board which is placed in front of the observer with zero degrees being directly along the track-line that the vessel is following.

An Angle Board

Measuring accurately the distance to an individual or group of cetaceans is not easy. There are aids available, such as a rangefinder (built into some binocular models) or you can take a stick like a ruler, mark off lines along it that correspond to specified ranges, and then hold it at arms' length to the horizon. Knowing your eye height above sea level, it is possible to determine how far below the horizon the animal is, and from a table or Excel spreadsheet, calculate its distance (see illustration). How to make and use a simple measuring stick is explained in more detail following link: in the https://www.osc.co.uk/tools/range-estimation-using-Note that you need to have an range-stick/. uninterrupted view of the horizon beyond the sighting.

Using a measuring Stick

If you want to gain experience on undertaking linetransect surveys, we run training courses and also take on volunteers each summer within our internship scheme. More details can be found on our website.

I have described above the type of survey that will allow one to estimate abundance and map density distributions. I urge you to work with us to increase our survey coverage using this methodology. However, if you don't have the means or inclination to do those, you can still help provide useful data if you have a vessel of your own or can join another vessel (any size from a small motor or sailboat to a large ferry). The important thing is to record your vessel track, the sea conditions and when they change, and the basic information from each sighting that you have: species, group size (plus number of adults, juveniles and calves), time, date, location (preferably coordinates), sea state, and behaviour.

If you can also use any of the methods described (such as estimating the distance the sighting was from you), that is of additional value for the reasons given above. Most importantly, you distinguish the periods (start and end times and positions) when you are doing a dedicated watch scanning the sea for cetaceans, from those times when you are not watching or doing so only casually.

Many thanks to all of you who conduct vessel-surveys for us already. It really helps.

Small vessel observation platform Photo credit: PGH Evans

Large vessel observation platform Photo credit: P Anderwald

To help you with vessel surveys, we have recording forms to download and print out before you head off on your survey. Click the links below to be taken straight to the forms. <u>Vessel-based Effort Recording form (Needed for every survey)</u> <u>Vessel-based Sightings form (Only needed when you have a sighting)</u>

You can find instructions for completing our forms here.

Alternatively, you can use our newly-developed Recording App - Sea Watcher. Click on the relevant store's logo below to be taken straight to the App.

More information about conducting vessel surveys can be found in our YouTube video: <u>https://www.youtube.com/watch?v=0z4XOhww_V8</u>

Observation set-up. Photo credit: SWF

Pre-determined transect lines for estimating cetacean abundance in northern Cardigan Bay. (boundaries of two Special Areas of Conservation also shown). Photo credit: SWF

Further Reading

Buckland, S.T., Anderson, D.R., Burnham, K.P., Laake, J.L., Borchers, D.L., and Thomas, L. (2001) Introduction to Distance Sampling. Oxford University Press, Oxford. 432pp.

Evans, P.G.H. and Hammond, P.S. (2004) Monitoring cetaceans in European waters. Mammal Review, 34(1): 131-156.

Hammond, P.S. (2010) Estimating the abundance of marine mammals. Pp. 42-67. In: *Marine Mammal Ecology and Conservation*. *A Handbook of Techniques* (editors I.L. Boyd, W.D. Bowen, and S.J. Iverson). Oxford University Press, Oxford. 450pp.

Dawson, S., Wade, P., Slooten, E., and Barlow, J. (2008) Design and field methods for sighting surveys of cetaceans in coastal and riverine habitats. *Mammal Review*, 38(1): 19-49.

A deep dive into: whalewatching from North-East Iceland

Edda Elísabet Magnúsdóttir, from the Department of Life and Environmental Sciences at the University of Iceland, takes a closer look at what makes North-East Iceland one of the best whale-watching locations in Europe.

Iceland lies just 25 nautical miles south of the Arctic Circle in the middle of the North Atlantic. The subarctic waters of Iceland's north-east coastline are surrounded by white mountain tops, tinted with pink light from the midnight sun during the summer months. Add to this breath-taking setting a close encounter with one of the enigmatic and fascinating cetaceans which live in these waters, and the experience can be mind-blowing.

What you might see

The deep fjords and bays in North Iceland and the proximity to the 200m isobath provides a habitat for various whale species, both shallow water coastal species such as humpback whale, minke whale, white-beaked dolphin, harbour porpoise and killer whale and offshore deep water species such as blue, fin and sei whales, long-finned pilot whale, northern bottlenose whale and sperm whale.

Why the area is so attractive to cetaceans

The area is highly productive, due to the mixing of nutritious freshwater from river run-off with cold ocean currents from the north and warmer water from the south. The Irminger Current, a branch of the Gulf Stream is responsible for the influx of warmer water into the area. It facilitates a clockwise coastal current which creeps into fjords and bays and actively mixes the water column. Such mixing is important for the transport of nutrients from the bottom towards the surface, where they are utilised by photosynthesising phytoplankton during spring and summer, the basis of the marine food web.

These clockwise currents travelling around Iceland are also important for distributing fish larvae. Fertilised fish eggs or hatched larvae from the South and West coast are carried north and eastward where they settle in so called 'coastal nurseries' while growing into more mobile and stronger sub-adult or adult form.

The main prey type attracting filter feeding baleen whales into this area are shoals of krill and juvenile pelagic and demersal fish such as capelin, herring, cod, and haddock. Dolphins and porpoises primarily hunt larger fish such as cod, haddock and pollock but sometimes also sand eels and herring. Deep diving whales such as long-finned pilot whale, sperm whale and northern bottlenose whale hunt for squid in the deep, but pilot and sperm whales are more opportunistic and may also hunt fish, including mackerel and redfish.

Northern bottlenose whale

Visiting humpback whales

Like many other baleen whales, humpback whales are migratory, and frequent these waters from

spring to autumn to build up their energy reserves before migrating to tropical breeding grounds in winter. As the sun rises higher in the sky again during March-May, large and powerful spouts of air become a common sight as the migrating humpbacks return, along with other seasonal species like minke whales and blue whales.

Since around 2010, humpbacks have become the most sighted whale species in these northern waters with the most common sightings throughout the summer and until at least November. Even though these are the best months to see humpbacks in Iceland, they are sighted throughout the year, even during the darkest and coldest winter months of January and February.

This overwintering behaviour seems to occur every year by different individuals and could be controlled by the whales' body condition at each time, reproductive state and prey availability, which helps them decide whether or not to migrate. With a warming climate, there might be more availability of prey on high latitude feeding grounds further into the winter which could continue to affect their migration behaviour.

Regular visitors

Humpback whales and blue whales have a strong preference for these waters. Despite having a large home range, many stay true to certain bays and fiords. The local whale watchers have, therefore, become quite familiar with some of these whales. Meeting these regulars again, after months or even years have passed, is incredibly rewarding and exciting.

Blue whale

One of those regulars is a blue whale named 'Volcano II', who has been studied quite extensively by researchers in Skjálfandi Bay. From this whale we have, for example, made new discoveries about blue whale foraging calls.

Another interesting regular in these waters is a fin whale–blue whale hybrid, usually just called 'Hybrid'. 'Hybrid' is understandably quite different from most other whales and easily recognisable by his mix of blue and fin whale characteristics. 'Hybrid' has a dorsal fin typical for fin whale and a darker appearance than his blue whale relatives, but has their mottled pigmentation. 'Hybrid's' dorsal fin is quite distinctive: parts of it have been cut or torn off, making him easy to recognise even from a distance.

Humpbacks dominate this group of regulars. Around 40% of the humpback whales feeding in these waters during the summer have been sighted before, and around 15% of them visit regularly. Humpback whales are easily recognised by the characteristic pattern on the underside of their flukes, which is unique to each individual whale.

Humpback diving, showing its unique fluke pattern

A humpback whale named 'Jackson' (or 'Depill' depending on which whale watching company you visit) has shown up every summer now for at least 4 years in a row in Eyjafjörður, and, hopefully, will continue to do so for many years to come. With the apparent increase of humpback whales in these waters, the numbers of known acquaintances might rise in the coming years.

Other species

There are other characteristic species for these coastal waters, such as the agile and beautiful minke whales which are the smallest of the rorquals. After the numbers of humpbacks started to increase, the number of minke whale sightings have declined, likely due to their distribution moving even further north in the summer and possibly to avoid increasing competition for food with the much larger humpbacks.

Minke whale

Other common species are the energetic whitebeaked dolphin and the more elusive harbour porpoise. Both species are mostly resident throughout the year in these coastal waters. White-beaked dolphins are particularly playful and curious. They often approach boats to bow ride and are sometimes seen doing the same thing around travelling fin whales and humpbacks.

White-beaked dolphin fast-swimming

The other regular visitors in this area, the fin whale, sei whale, bottlenose whale, pilot whale and sperm whale, are sighted more rarely, primarily during the summer and autumn.

Killer whales visit these waters occasionally, but their occurrence is quite unpredictable and sightings can occur in all seasons. Little is known about why these killer whales visit. The area is not a typical feeding ground for them, and larger schooling pelagic fish such as mature herring, which are their common prey, are unusual in this area. Killer whales have, however, been seen hunting harbour porpoises and minkes in these waters so it is quite possible that they scout them primarily to hunt marine mammals.

An underwater world of sound

Year-round recordings from bottom-mounted sound recorders have been collected since 2008 in Skjálfandi Bay. These recordings have revealed much that doesn't meet the eye. Recordings of various species have been captured in all seasons, both fish such as haddock and cod, seals, and various cetacean species.

By eavesdropping in the deep we have learned that humpback whales wintering in these waters sing extensively during the winter darkness. These songs are sung by males and serve as a breeding display during winter, possibly to attract females and advertise one's readiness to mate but also to rout out other males. The purpose of such singing on a feeding ground is not fully understood. It may serve as means to exchange new songs before migrating, since humpback whales conform to the same song type every year during the breeding season (~Jan-Mar). Such exchanges of information are known as 'cultural transmission' and are well known to occur among humpbacks. Also, these sub-arctic songs may be an indication of opportunistic breeding on a feeding ground.

The recordings have also shown us that blue whales can be heard in the area, despite not being noticed by the boat traffic closer to the coast. The first blue whale feeding calls are usually heard in April while the first sightings are usually in late May or early June. Since blue whale calls can be heard at least 30 kilometres away from the recorders, these early calls are probably being transmitted from more offshore waters. These feeding calls can be continually detected throughout the late-summer without sightings, indicating that they head back out to the nearby offshore waters in ~July-August.

Though not sighted very frequently, sperm whale clicks have been detected several times by the recorders as they scan the fjords with their echolocation pulses - the loudest sounds made by any creature on earth. And let's not forget the enchanting communication whistles of the whitebeaked dolphins, which echo across these waters throughout the year. These recordings remind us of the vast diversity of wildlife living in these subarctic waters all year round.

Getting out on the water

Due to the prolonged occurrence of humpback whales in the northern waters of Iceland, whale watching has started to operate throughout the year in Eyjafjörður fjord. Despite the cold, this narrow 60 km long fiord is uniquely sheltered from the winter storms by tall mountain ridges. As a result, the weather can be calm in the fjord while storms rage just outside of it.

A trip out into the water when winter has taken over is a magnificent experience; the mountains become even more spectacular when covered in snow, and the soothing sound from the whales' blow reminds us that life is still active in the deep while everything is quite dormant on land.

Whale watching has occurred off the northeast coast of Iceland since around 1993, and in 1995 a formal whale watching operation started in Húsavík, with regular trips into Skjálfandi Bay. Now, 25 years later, this activity has grown fast and whale watching boats are quite numerous on the water during the summer.

This area is of great importance for many whale species throughout the year, and the summer is a particularly important season for them to load up their energy reserves. Therefore, it is important that the whale watching companies are responsible and take care not to disturb the whales with constant, close, or fast approaches.

To ensure the continued presence of whales in this area it is important that whale watching guests take care to choose a company that practices responsible whale watching and strictly follow the codes of conduct designed for Icelandic whale watching operators. With that in mind, Northeast Iceland is a place like no other in which to experience the natural world and interact with these spectacular animals.

Whale-watchers observing a sperm whale

References

Akamatsu, T., Rasmussen, M.H., and Iversen, M. (2014). Acoustically invisible feeding blue whales in Northern Icelandic waters. *Journal of the Acoustical Society of America*, 136(2): 939–944.

Guðmundsson, K., Gislason, Á., Ölafsson, J., Þórisson, K., Björnsdöttir, R., Steingrímsson, S.A., Ölafsdöttir, S.R., and Kaasa, Ö. (2002). *Ecology of Eyjafjörður Project: Chemical and biological parameters measured in Eyjafjörður in the period April 1992 - August 1993*. Fjölrit Hafrannsóknastofnunar.

Magnúsdóttir, E.E. and Lim, R. (2017). Why sing in the sub-arctic? Humpback whale (Megaptera novaeangliae) song structure and progression from an Icelandic feeding ground during winter. (Unpublished manuscript). Reykjavík, University of Iceland. Magnúsdóttir, E.E., Miller, P.J.O., Lim, R., Rasmussen, M.H., Lammers, M.O., and Svavarsson, J. (2015). Humpback whale (Megaptera novaeangliae) song unit and phrase repertoire progression on a subarctic feeding ground. Journal of the Acoustical Society of America, 138(5): 3362–3374.

Magnúsdóttir, E.E., Rasmussen, M.H., Lammers, M.O., and Svavarsson, J. (2014). Humpback whale songs during winter in subarctic waters. *Polar Biology*, 37(3): 427–433.

Sigurjónsson, J. and Víkingsson, G.A. (1997). Seasonal abundance of and estimated food consumption by cetaceans in Icelandic and adjacent waters. *Journal of Northwest Atlantic Fisheries Science*, 22: 271–287.

Walk, A. (2005). Þróun hvalaskoðunar á Íslandi. University of Iceland.

Harboe-Hansen, C. (2013). Patterns within blue whale *Balaenoptera musculus* downsweep vocalizations in Icelandic coastal waters and anthropogenic influence on their occurrence. B.Sc. thesis. Copenhagen University.

Conservation Focus: The Effectiveness of Management in Marine Protected Areas

nder Annex II of the EU Habitats Directive, a network of marine protected areas referred to as Special Areas of Conservation were proposed for particular marine wildlife species considered especially vulnerable to human activities. Amongst marine mammals, these included bottlenose dolphin, harbour porpoise, grey seal and harbour (common) seal. All cetacean species have also been designated within Annex IV as European Protected Species.

European Protected Species are protected under Article 12 from deliberate killing (or injury), capture and disturbance throughout its range. Within the UK, these regulations became enshrined in law by the Conservation (Natural Habitats, &c.) Regulations 1994, which was amended in England and Wales in 2017.

From 1st January 2021, with the UK no longer part of the European Union, some amendments came into force (Conservation of Habitats and Species Regulations 2017 (regulation 9(1), as amended by the 2019 Regulations). These currently apply to inshore waters up to 12 nautical miles and explain how the amendments to the legislation work; they do not cover offshore waters beyond 12nm (which are covered by the Offshore Marine Regulations 2017) but similar processes are expected to be applied.

Most of the changes described above have involved transferring functions from the European Commission to the appropriate authorities. All other processes or terms in the 2017 Regulations have remained unchanged and existing guidance is still relevant. The obligations of a competent authority in the 2017 Regulations for the protection of sites or species do not change.

Within the UK, governing authorities also have the power to amend the species listed under the relevant Annexes. Scotland has already designated

marine protected areas in their waters for minke whale and Risso's dolphin. We hope that England and Wales will consider following in their footsteps.

Designating an area as a Special Area of Conservation (SAC) means something only if it really does effectively protect the species and habitats for which it was set up. That requires appropriate management of human activities within the site and for those species that move in and out of the site, consideration of conservation measures that apply to that particular population across its range. Sadly, in so many cases, SACs are not fulfilling those objectives.

As I reported in the winter issue of this magazine, Sea Watch was awarded a contract by the European Commission as part of an international consortium including experts from Sweden, Germany, France and Spain, to find better ways to assess the effectiveness of management measures within Marine Protected Areas. Although these now can only be applied to EU Member States and therefore not to the UK, we hope there will be lessons learned of general benefit. Over the next 18 months, we will report on the conclusions and recommendations made.

Under the Habitats Directive, the main conservation objective as applied to marine mammals, has been that the site should be able to support a viable population of the species targeted. All marine mammal species move around, and it is potentially significant that the SACs established for the bottlenose dolphin in Cardigan Bay and the Moray Firth are both showing evidence of portions of the population spending increasing amounts of time outside the areas set up for their protection. Members of the bottlenose dolphin population in the Moray Firth are now being seen year-round off the coast of Eastern England, whilst numbers of dolphins within the core area of the Cardigan Bay SAC have declined, with indications that they are

occupying other parts of the Irish Sea. There are several possible reasons for these changes. In the case of the Moray Firth population, there is evidence that numbers have increased so it may be that the food resources within the SAC are no longer sufficient to meet their needs. For the Cardigan Bay population, however, there is no evidence of an increase. Indeed, there has been a decline in the last ten years but with our knowledge of their status elsewhere in the Irish Sea being so poor, it is very difficult to know whether or not

Bottlenose dolphins, Cardigan Bay. All above photos, credit: PGH Evans

Conservation Focus...continued

human activities are playing a part. In recent years, our monitoring of the Cardigan Bay bottlenose dolphin population in Welsh seas has been seriously hampered by lack of funding such that we may have to cease our research there. For management to be effective, it is essential that one can track the status of the population that is to be protected, and understand better the impact of different human activities that are often each growing in their intensity, so that conservation action can be taken.

Bottlenose dolphins, Cardigan Bay. Photo credit: P Anderwald

Map of Cardigan Bay showing the SACs

Sightings summary:

February 2021 – What's been seen and where...

The continuation of lockdown affected the ability of people to get to the coast, but even so a total of 136 sightings were reported to us, of 7 confirmed species, including some unusual winter sightings.

he first five days of February were mild in the south, cold in the north, and unsettled, followed by a very cold easterly spell with heavy snowfalls in some areas. It turned much milder for the second half of the month, and wetter in most areas with frequent strong winds from 13th to the 24th, before

a quieter anticyclonic spell arrived for the last few days. Covid restrictions continued throughout the UK, limiting visits to the coasts for many people. A total of 136

Snow, wind and the lockdown all made watching quite difficult at times

sightings were reported to us, comprising seven cetacean species.

As always, harbour porpoises were the most frequently spotted species as well as the most widely distributed. They occurred from the Shetland

were seen in small numbers but were widely distributed Numbers were always small, usually four of less individuals in a group, with the maximum reported being eight in Yell Sound, Shetland.

Bottlenose dolphins were also reported from several locations. In the Irish Sea, sightings were scattered, reflecting the wide dispersal of animals we customarily see during winter. The most interesting record was a group estimated to number around 50 animals off St Anne's Head, west Pembrokeshire. It is unusual to see large groups of bottlenose dolphins south of Cardigan Bay.

Other sightings in the Irish Sea were of groups of less than ten off the end of the Llŷn Peninsula in NW Wales and around the Isle of Man. In southern England, there was a sighting of a group of five in Goodrington Bay, South Devon, and several sightings of groups typically of 20-40 animals at various locations in the Channel Islands, including Jersey, Guernsey, Aldeney and Herm. Along the east coast, small groups (usually less than ten) of bottlenose dolphins were seen in the Moray Firth, around the Aberdeen and Angus coasts to as far south as Flamborough in Yorkshire. Finally, there was a sighting also of a small group in Orkney which is unusual.

During the month, we had only two confirmed sighting reports of common dolphins sent to us, one of two individuals in the Bristol Channel at Portishead in Somerset, and a group of about forty in Fermain Bay in Guernsey. At this time of year, most sightings of common dolphins in the UK tend to be in the English Channel.

Unusually for February, there were three sightings of white-beaked dolphin in coastal waters, two in Sullom Voe, Shetland (probably of the same two individuals), and one of three individuals at Howick, Northumberland.

Risso's dolphin is another species that is rarely reported in winter but during the month there was a sighting of a pod of 12,

Reports of Risso's dolphin show the value of winter watching

west of Burra in Shetland, and a single individual at St Martins Point in Guernsey. These sightings emphasise the value of winter watching to build up a better picture of the presence of some of the less common species.

Killer whales or orcas continued to be spotted regularly from many localities in Shetland, probably representing the same pod, typically numbering eight individuals. The rise in interest of orcas in these islands almost certainly has contributed to the increased frequency of records.

No minke whales were Humpback whales reported during February, but were spotted at there were several sightings of both ends of the humpback whales. One British Isles individual was repeatedly seen off Kinghorn in Fife and Inchcolm in the Firth of Forth between the 1st and 20th of the month, whilst up to two humpback whales were seen off the Northumberland coast at Craster, and off Cullernose Point, between the 24th and the 28^{th.}

Elsewhere, two humpbacks were seen at Echna Loch Bay in Orkney on 17th whilst at the other end of the British Isles, one was seen near Watchet East Pier in Somerset on the 11th.

Many thanks to everyone who got out and about in February.

Spring is just around the corner and as Covid lockdown eases, we can expect a rise in sightings from March onwards, so keep a lookout!

Don't forget – if you spot a cetacean in the waters around the British Isles, please report it to us!

You can:

- use our Sea Watcher App OR
- enter the sighting on our website (go to: <u>www.seawatchfoundation.orq.uk/sightingsform,</u> OR
- email us at <u>sightings@seawatchfoundation.org.uk</u>, giving your name, phone number, date of sighting (and, if possible, the time), location, and what you saw

Also, we welcome any images you might have captured of your sightings. Please email these to us at the email address above.

members.seawatchfoundation.ora.uk

Sea Watch News: National Whale and Dolphin Watch - 2020

The report from the annual National Whale and Dolphin Watch (NWDW) was published early in March. Chiara Giulia Bertulli, Sea Watch's Sightings Officer, gives us the highlights.

ational Whale and Dolphin Watch 2020 (NWDW), took place from 25th July to 2nd August. Taking part were wildlife enthusiasts, the general public, as well as researchers. Around 750 people from all over the UK participated, armed with binoculars, our recording forms, and bags of enthusiasm.

The aim of the survey has been to obtain a snapshot picture of the status and distribution of some of the species of cetaceans (whales, dolphins and porpoises) recorded in UK waters through systematic watches from both land and sea, as well as casual watches, whilst also raising public awareness of the wealth of marine mammals we have around our coasts.

NWDW 2020, in particular, was a great effort: different collaborative 29 wildlife conservation and recording organisations took part, including ORCA, Hebridean Whale and Dolphin Trust (HWDT), Yorkshire Wildlife Trust, MARINELife, and Manx Whale and Dolphin Watch, who have contributed data collected from 50 boats (inshore and offshore) and from 185 land stations in different parts of the British Isles. Very special thanks go to Rip Curl, Made of Sundays, and Williams Art who sponsored the 2020 event by donating free gifts for the participants.

It is with the help of all the wonderful dedicated volunteer observers out there that we have compiled 19 years of NWDW data. We use these data to protect and conserve whales & dolphins in UK waters.

1,348 sightings of cetaceans totalling 9,784 individual animals were reported. This number of

sightings is lower than the estimates recorded in the last four years but circumstances in 2020 clearly differed markedly from any other year when the event was run.

Nine different cetacean species and four noncetacean species were recorded during NWDW 2020 around the UK, a number previously recorded in 2006 and 2009. The lowest amount of species (eight in total) was recorded in 2007, and the highest (13 species) in 2015. England recorded the highest number of sightings (48% of all records), closely followed by Scotland with 510 sightings (38% of records), then Wales with 194 sightings (14% of records). One sighting was also recorded in Northern Ireland (0.1%).

The most memorable sightings from the 2020 National Whale and Dolphin Watch week include Humpback whales off Grishipoll in the Inner Hebrides, Risso's dolphin groups off the Outer Hebrides, Shetland, Orkney and NE Scotland, killer whale pods off Shetland and around Caithness, common dolphins and large pods of Atlantic whitesided dolphins around Shetland were particularly notable sightings.

Land watch above Brean Down Fort, Somerset. Photo credit: Emily Babbage

Species	No. of sightings	%	No. of individuals	%	Av. Group Size
Atlantic white-sided dolphin	16	1.19	667	6.82	41.69
Bottlenose dolphin	213	15.80	2169	22.17	10.18
Harbour porpoise	507	31.61	1353	13.83	2.67
Humpback whale	9	0.67	15	0.15	1.67
Minke whale	118	8.75	141	1.44	1.19
Orca	19	1.41	47	0.48	2.47
Risso's dolphin	30	2.23	289	2.95	9.63
Common dolphin	274	20.33	4385	44.82	16
White-beaked dolphin	13	0.96	44	0.45	3.38
Unidentified cetacean	34	2.52	141	1.44	4.15
Common (harbour) seal	17	1.26	25	0.26	1.47
Grey seal	79	5.86	444	4.54	5.62
Basking Shark	8	0.59	51	0.52	6.37
Sunfish	11	0.82	13	0.13	1.18
Totals	1348	100	9784	100	7.26

Bottlenose dolphins off the Channel Islands Photo credit Laura Harm

Land watch at South Crabster, Caithness. Photo credit: Zoe Doran

Map showing distribution of boat and land watches, NWDW 2020

Common dolphins sighted off Soar, Devon Photo credit: Andrea Duxbury

Land watch from Duncansby Head, Caithness. Photo credit: Finlay Pringle

Join us for National Whale and Dolphin Watch 2021 - 24th July - 1st August For news about the event, visit our website and look under 'Get Involved'.

Sea Watch News: Orca Watch 2021 now online

You may have noticed a slight Orca theme to this issue of Sea Watcher, as we look forward to our first big outreach event of 2021 - Orca Watch. The dates for your diary are Saturday 29th May - Sunday 6th June, but rather than being held physically in north east Scotland, it will now have to be largely an online event.

O rca Watch is a seasonal week of dedicated effort centred around the North and North East Coast of Scotland – targeting particularly from Strathy Point to Wick. It was set up in 2012 by the then regional coordinator, Colin Bird, to assess how orcas and other cetaceans were using the waters of the Pentland Firth, to then input to planning proposals for an offshore wind farm (which became operational in 2018).

Based in John O'Groats, but with watches from all around the Caithness and Sutherland coast, and from the Orkneys and Shetland, year on year Orca Watch has attracted increasing numbers of visitors keen to see orca in UK waters. 2019 was the busiest and most successful Orca Watch yet, with double the effort-related hours (c. 200) compared with 2018. There were 122 sightings of seven different cetacean species from 30 land watch sites as well as from the John o' Groats passenger ferry. Sightings were also contributed from the Hebrides and west coast of Scotland.

Covid-19 put paid to our plans for Orca Watch 2020 and we find ourselves in a similar position in 2021.

Although all the UK nations have set out their plans out of lockdown, together with indicative dates, the pace of the routes and details of the steps along the way varies from nation to nation. By the time of the event, while England may be close to normal (if all goes well), Scotland (where Orca Watch is held) will be slightly behind. Having examined in detail the Scottish plans, we reluctantly took the decision to move Orca Watch online. Our top priority is the well-being of the local communities and event attendees. We want to play our part to get life back to normal at the earliest possible date across the UK, and do not want to risk helping spread the virus and harming the community. We shared our decision and rationale with the Dunnet & Canisbay Community council, and they gave us their full support.

However, we are recruiting **local** volunteers to conduct effort-related watches during Orca Watch week, keeping within the Covid-regulations in place at the time. Their data, and any sightings, will be forwarded to Sea Watch on the day. Online, we will be hosting an evening roundup of what has been seen each day, together with other cetacean news. We plan to kick-off the week with a ticketed evening of talks on Saturday 20th May, and will end on Sunday 6th June with a closing session, rounding up what happened during the week. More details of the online programme and how to take part will be available in due course on the Sea Watch website. We will also publish them in the April Sea Watcher bulletin.

We really hope to be back at John O' Groats for Orca Watch 2022, to welcome and support a pool of about forty Official Volunteers from all over the UK as they help us put in even more land-watches, as well as engaging with casual visitors and orca fanatics at our Orca Watch base in John O' Groats.

Sea Watch News...continued

Sea Watcher

Although Orca Watch week is a good time to spot Orca in the area, they are increasingly being seen regularly at other times. And other cetaceans as well as diverse bird life, seals and otters, can all be seen from around the Orca Watch area. So, if you are planning to visit north Scotland during the year, when it is safe and permitted to do so, we encourage you to check out Orca Watch's Official Accommodation partners, who will welcome you with open arms.

Two miles west of Gill's Bay and only a 25 minute walk to St John's Point (a good spot to watch for cetaceans), **the Crofter's Snug** is kindly offering would-be Orca Watchers a 10% discount for bookings of 3 nights or more for their three self-catering glamping units. To take advantage of this offer please book direct via email <u>info@thecrofterssnuq.co.uk</u>.

The Highland Haven is a Scandinavian inspired barn between John O'Groats and Dunnet Head. Its location is perfect for orca watch groups of up to 12. Catering can be provided. For best rates contact Bronagh on 07377267555 or email <u>thehighlandhaven@amail.com</u>

Northern Sands is a 12-bedroom hotel, just next to Dunnet Bay and is the closest hotel to Dunnet Head (both good places from which to watch for whales and dolphins). Remember, you're likely to get the best price by booking direct, either online or by phoning 01847851300.

Seaview Hotel is a short walk from the centre of John O'Groats. Remember, to get the best rate book direct via their <u>website</u> or by phoning 01955 611220.

Together Travel is at the centre of John O'Groats. They are kindly offering would-be Orca Watchers a 10% discount, if staying for at least three consecutive nights during 2021. To take advantage of this offer, please phone 01625 416 430, and quote ORCA 2021 (NB: This offer is not available if you try to book online.)

Orca Watch Official Accommodation Partners

Hawthorns

Hawthorns B&B, Mey, is between Dunnet Bay and Gills Bay Ferry (both good spots for watching out for cetaceans), just a short drive from John O'Groats. They are kindly offering would-be Orca Watchers a 10% discount on the price shown on the website, for stays of 2 nights or more. To take advantage of this offer you must book direct via email – <u>stay@meybandb.co.uk</u> – or by phoning 01847 851444. (This offer is not available if you try to book online.)

Pentland Lodge House, Thurso, is kindly offering would-be Orca Watchers a discount of 5% based on two people sharing a room and staying for three nights or more. To take advantage of this offer, please book direct via their <u>website</u> or by calling 01847 895103. There are watch sites in Thurso itself, and you pass many other likely sites on the 30 minute drive along the coast road from Thurso to John O'Groats.

Windhaven Café, B&B and camping is kindly offering would-be Orca Watchers а 10% discount, if staying for more than one night. This offer is only available by booking direct through thier Windhaven website. overlooks Brough Bay - a good site to watch for cetaceans - and is a twenty minute drive from John O'Groats, passing other likely sites along the way.

officer in position

Sea Watch News: A Visitor from the North

A round the British Isles, climate change has seen several cetacean species and their prey extending their ranges northward – striped dolphin, Cuvier's beaked whale, pygmy and dwarf sperm whale amongst cetaceans, and blue-fin tuna, sardine and anchovy amongst fish species. And yet, at the same time, northern Europe has had records in recent years of arctic marine mammals: a bowhead whale seen at multiple locations from Cornwall, France, Belgium, the Netherlands, Northern Ireland and the Republic of Ireland between 2015 and 2017; a narwhal in the River Maas in Belgium in 2016; and belugas in Yorkshire and Northern Ireland in 2015, and in the Thames Estuary over the winter of 2017-18.

As I write, another arctic visitor has taken up temporary residence in SW Wales – a subadult walrus. This is one of the most southerly locations that the species has ever been seen. It was first spotted on the coast of Valentia Island in Co. Kerry on 14th March, much to the surprise of Alan Houlihan and his five-year-old daughter Muireann. It was a rare sighting for Ireland, the previous confirmed records being in 1999 and 2004, both in Clew Bay, Co. Mayo.

It was not seen again until a week later on 21st when the very same animal (identified by a distinct white mark on its flipper) was seen on the coast of west Pembrokeshire in Broadhaven Bay. Since then, it has been seen a few times, even basking on the pier at Tenby, with photos taken by our

The walrus in the water off Tenby. Photo credit: Josh Pedley

monitoring officer, Katrin, and former interns Josh and Claudia.

Over the last twenty years, there have been only two other walruses sighted in Britain, the first in Orkney in 2013, and the second also first seen in Orkney in 2018, but then spotted at various sites on the coasts of Caithness and Sutherland, before being last seen on the Isle of Harris, Outer Hebrides. In neighbouring Netherlands, there have been five documented sightings since 1900, the most recent in Ameland in 1998.

So why do we get sightings of arctic marine mammals when the climate is warming? That is an interesting question to which we do not have a definite answer. One possibility is that the melting of the ice cap and subsequent break -up of ice has led to it drifting further south along with those species closely associated with it, such as bowhead and narwhal, walrus and bearded seal (another species that has been seen on several occasions in North Scotland and the Northern Isles).

Most records of walrus occur in the spring, between March and May when sea temperatures are still pretty low, so maybe walruses, particularly young ones, wander over wide areas as pack ice splits up and also disperses. Whatever, the reason, the occasional visits of these arctic mammals, reported also from past centuries, give those fortunate to find them, an experience they are unlikely to forget.

Hauled out, the flipper marks used to photo-id it are clearly visible. Photo credit: Katrin Lohrengel

Where are they now? – Rob Lott

In this occasional feature Rob, Sea Watch collaborator, tells us about his career path

Rob in Grundarfjordur

"Man cannot discover new oceans unless he has the courage to lose sight of the shore."-André Gide

As a child growing up in Wales, family holidays were often spent 'down west' in Pembrokeshire or Ceredigion. I vividly remember one such trip to New Quay as a small boy building sandcastles on the beautiful beach. We must have headed up to the village for an ice cream at some point and I immediately noticed a large crowd had gathered at the end of the harbour with people excitedly waving and pointing out to sea. Unusually for me, the thought of an ice-cream was quickly forgotten as we headed over to check out what all the fuss was about. My six-year old self probably had no opinion of the sea – cold and maybe a bit murky sometimes - but as I worked my way through the crowd and hauled myself up on to the low wall, I was astonished to see a patch of 'boiling' water with two, maybe three, dolphins no more than 50 metres off the sea wall.

Fast forward through the years and after graduating with a Zoology degree from Swansea University I remember handwriting (old school!) many, many letters looking for volunteer opportunities. I received only a few replies (including a positive one from Peter Evans) but took up an offer to volunteer at OrcaLab in British Columbia and I have been going back in some capacity for the last 30 years.

Following that first visit to OrcaLab, with a taste for adventure, I spent a year travelling. On my return I spent ten years working in other industries busily keeping the hamster wheel spinning to satisfy the mortgage, student loans etc. until one day, on a tea-break in work, I picked up a magazine and read something that would change my life..... a news report on a new Masters programme dedicated to marine mammals...and it was in Wales! I was well into my thirties at this point but I submitted the application nevertheless and was delighted when I was accepted. I deliberated – briefly - as to whether I should give up a great job and go back to student life but the timing was perfect for me to leave and pursue a new chapter (I remember a good friend at work telling me at the time 'You've got nothing to lose except your chains!). It was only then that it hit me that I had a fair bit of 'life' to pack up in Cardiff - job, house etc, but undaunted, I bit the bullet and set myself the task of quickly tying up these loose ends, rented out my house, packed the car and headed north where I enrolled on the one year Marine Mammal Science M.Sc. course at the University of Wales, Bangor.

I loved the course but it was intense and quite soon on in the year, our thoughts turned to dissertation topics. I knew I wanted to do mine on the bottlenose dolphins of Cardigan Bay so I contacted the Sea Watch Foundation (then based at the Cardigan Bay Marine Wildlife Centre) and was offered the opportunity to look at group size, social associations, and residency patterns of the dolphins. The following spring I moved to New Quay sharing a house high up on the hill where I could often see dolphins from bed! What was supposed to be a three month stay ended up being more like nine as I enjoyed one of the best times of my life. New Quay has definitely had a hold over me since that first cetacean encounter as a child, and its unique magic brings me back time and time again.

In addition to my work with SWF, I have had a longstanding association with the charity, Whale and Dolphin Conservation (WDC). First as a volunteer rattling collection tins, attending protest marches etc. - and also working as a naturalist guide for them all over the world (including introducing people to the chunky dolphins of Cardigan Bay).

I had a huge stroke of luck towards the end of my studies, when WDC advertised a post looking for someone to manage their responsible whale watching programme. I applied and got the job and within weeks of handing in my thesis I started full time at WDC where I've been ever since. Over the years I've worked on the UK Education programme and in Science which included organising and conducting fieldwork on the relatively elusive Risso's dolphins found around Bardsey Island off the Llyn Peninsula.

Today, my role at WDC is focused on animal welfare - particularly the issue of whales and dolphins held in captivity, performing circus tricks for human entertainment. This work is varied but hugely rewarding and there's been a definite shift in public opinion over the last decade or so as more and more tourists just shake their head and walk away from marine parks.

By far the biggest project I have been working on in recent years is the establishment of the world's

first whale sanctuary for former captive beluga whales. Working in partnership with The SEA LIFE Trust, WDC has developed an open water sanctuary site in Iceland that will care for two incredible individuals, Little White and Little Grey. Born in the wild in the Far East of Russia, they were taken from their families as young calves and moved to a marine park in Shanghai where they spent their entire adult lives performing for the public. In June 2019, they were flown to Iceland to start a new life and our goal now is simple: to give the whales a brighter future and significantly improve their physical and mental well-being. The belugas moved into the sanctuary in September 2020. To find out more about the sanctuary, and how the whales are faring, click here.

I'm still involved with Sea Watch and for the last six years have participated in the annual Orca Watch event offering talks, helping with data collection, and, the best bit, introducing the public and fellow orcaholics to the wonderful wildlife found off the Caithness coast.

A pair of the 'chunky' Cardigan bay bottlenose dolphin. Photo credit: SWF

Profile – Karen Hall

Karen Hall, one of our two regional coordinators for Shetland tells us about her life with cetaceans

I'm Karen Hall and I'm one of the Regional Coordinators for Shetland. I share this role with Paul Harvey. Both Paul and I are very lucky in that our day jobs overlap with Sea Watch activities: Paul is the Shetland Biological Records Centre Manager. He looks after all the biological data (from commercial surveys to citizen scientists), and feeds this into the Shetland Marine Spatial Plan and other national datasets. I am a marine mammal advisor for <u>NatureScot</u>, providing advice about cetaceans and seals both in Shetland and elsewhere around Scotland.

I've always been interested in marine animals and initially I wanted to work with great white sharks following a bit of an obsession with the film "Jaws". This led to studying marine biology at university and hoping I could get a job vaguely related to this. (At the time a lot of my friends were giving up and going into better paid accountancy or computing careers). Following a lot of applications and working long hours in the retail and hospitality sector, I was offered a temporary job looking at marine litter in Shetland, and the rest they say is history!

I was no stranger to Shetland – I have family here – so knew what I was letting myself in for, but I still thought this would just be temporary. Shetland, however, has a way of getting under your skin.

11pm summer watch

They say if you can survive a winter then you'll be here long term – they were right - 23+ years later and I can't imagine myself anywhere else. In the summer, it can be wall to wall daylight but in the winter, it can feel like you've never seen the sun for months.

Shetland is spectacular for wildlife and as a marine biologist you literally have it all on your doorstep. Nowhere is more than 3 miles from the sea and because we are relatively close to the shelf break we often get deep water species close inshore. Where else can you spot a humpback whilst having your breakfast, see porpoise whilst driving to work, or abandon a video conference as orca are cruising past the office?

Humpback diving

My passion for sea watching really started following a cetacean ID course organised by Paul who had invited Sea Watch's very own Dr Peter Evans north to share his experience. Following that, the Shetland Sea Mammal Group was set up and we started to do more timed watches and try to learn a bit more about animals that were seen. I also realised through my work life that Shetland was missing off reports about UK cetaceans. This was a bit strange given we would see some things regularly from my house and even from the office. It became apparent that hard data were needed

and not just comments from a few of us saying 'but what about Shetland?'

Gradually, through arranging events for NWDW and submitting sightings, we managed to encourage more excitement about cetaceans which led to more records being posted. From fishermen talking about neesicks (porpoise) - 'I see them all the time but didn't realise anyone was interested', to tourists spotting 'something' whilst looking at puffins, sightings now come from all over the place.

Of course, killer whales have always been exciting to see. In the early days, we had a telephone grapevine where you were responsible for 'phoning a few folks with sighting news. Only a few had mobile phones and the coverage was pretty poor – this meant that a busy orca twitch would see 20 folks turn up.

Orca close to cliff

Nowadays, with social media (https://www.facebook.com/groups/shetlandorca sightings/– coordinated by Hugh Harrop who has been a godsend), WhatsApp, and generally better connectivity, it means that sightings information can be shared instantaneously - an orca twitch can attract several hundred folk!

My time now is spent extracting sightings from social media and uploading them to Sea Watch. Fortunately, with Shetland being a small place, you have a good idea of the level of experience of reporters or will know if the sighting has been verified by someone later on or maybe even lucky enough to have seen it yourself to get the correct ID. People are also very good at sending on pictures if they are not sure, so that you can make sure the correct ID goes out.

Harbour porpoise off Shetland

Like a lot of people who volunteer for Sea Watch, I wear multiple hats. I also help coordinate collection of strandings for SMASS (<u>https://strandings.org/</u>) and am a marine mammal medic. I've got very good at identifying dead things from descriptions on the phone 'I've found a baby killer whale" = porpoise; 'I've found a polar bear" = sperm whale blubber'. I've even got a sign on my office door 'dead animal department'! My strangest request came from the local Police who wanted me to check whether something washed up on a beach was human or not as it 'looked a bit strange'. Fortunately for everyone, it turned out to be a seal flipper!

Coordinating data collection for Sea Watch has led to all sorts of discoveries about how animals use our coasts. For example, we now know that orca can be seen year-round in Shetland. We know that we get large groups of porpoises coming inshore in the winter and from studying them further that they may be displaying mating behaviour. That humpbacks are stopping off on their way north to Norway, and on their way back to their breeding grounds.

And it's not just the data side – it's the engagement with the public. Showing someone their first ever killer whale – usually met with lots of shouting and crying; a salmon farmer calling you up to tell you 'yon minke whale is back again'; a fisherman passing on photos of humpback whales; or seeing the sheer joy when a Shetland resident sees their first ever porpoise. And that's what makes all the watching worthwhile.

The hundreds of hours that I, and others, have put in sea watching have most definitely been worth it – particularly over lockdown. I've had the privilege of some amazing sightings, most from my living room and all within an eight-mile radius of my house. Shetland, you rock! I cannot think of a better place to be locked down. And that's what makes all the watching worthwhile.

Levenwick Cliffs

My most memorable sightings

Over the years I've been lucky enough to see several species of cetacean – many of them from my house or office – but the ones that stick with me are:

- Watching killer whales at midnight in the summer from the cliffs at Sumburgh Head, in the twilight, looking down on a youngster playing with a lumpsucker.
- At the other end of the year, watching killer whales with my neighbours on Hogmanay as they hunted porpoise. Bitterly cold but not one of us could leave.
- Getting a call from a Noss warden about a number of giant floating logs could they be sperm whales? Yes, they were.
- The time that pilot whales came into Lerwick harbour and stopped the ferry docking.
- White-sided dolphins putting on an acrobatic display outside the Hillswick Wildlife Sanctuary.
- Humpback and minke whales bubble feeding huge bait balls form the cliffs below my house.
- Not being able to see minke whale properly as there were too many porpoise in the way in Mousa Sound.
- Skipping 'home school' with my son to go and watch killer whales it's not often you get a teenager voluntarily out of bed before 9 am!

My Top tips for sightings

You need to put in the time and have patience. A lot of people think you can just turn up in Shetland and see things. Although sightings networks on social media have made it far easier to see things, somebody still has to spot them first. Sometimes that person is just plain lucky but mostly it is because they have put in a bit of time watching the sea.

Expect the unexpected – is it a fin, sei, sperm, Sowerby's, beluga, walrus, bearded seal, striped, common dolphin (not very common in Shetland!)? We can get arctic species, deep water species, and southern species. I remember a particular discussion with Paul when we were trying to identify a very young dolphin calf – it wasn't a Risso's, Atlantic white-sided or white beaked which would be our 'go to species' – eventually we identified it as a striped dolphin which we wouldn't normally see around Shetland.

Karen will be conducting land watches for us from her local patch in Shetland, during Orca Watch. We look forward to sharing these during our live Orca Watch round-ups. (See page 32)

The Ambassador Abroad: At the Home of Orca Research

...Robin Petch, Sea Watch Ambassador

In this article, I explain my fascination with Orcinus orca, the Killer Whale, and share the best encounters I have experienced with the species off Vancouver Island, the home of orca research. But first I will share a little about the history of the research into this incredible and iconic animal.

Learning to love the killer!

I had been a supporter of the "Save the Whale!" campaign since being a teenager and already knew about the Free Corky campaign before becoming Education Director for International Dolphin Watch in 1991. Corky was captured from the A5 pod in British Columbia, Canada in 1969 when she was four years old and to this day is held at San Diego Sea World. In total, 63 orcas were taken from the Pacific Northwest populations between 1964 and 1977 and she is the only one still alive and is by far the longest lived captive orca anywhere in the world. The campaign continues and a sea pen in her home waters, where her brother and sister still swim, awaits her hoped-for release.

When the film "Free Willy" was released in 1993, I found myself invited to give short speeches about Corky and the issues around captivity before screenings and heard Paul Spong, the leader of the campaign, speak at a conference. As a whale scientist, Paul had been asked in 1967 to assist with the newly captured killer whales at the Vancouver Aquarium and quickly realised that these were "highly intelligent, social animals" and during a lecture in 1968, advised that they should not be kept in captivity! As one might imagine, this did not endear him to his employers and after witnessing the capture of 12 orcas at Pender Harbour in 1969 he left to set up OrcaLab on Hanson Island, in the waters of the "Inside Passage" of northern Vancouver Island. Here he continued his work studying communication but now with wild orcas, primarily through hydrophones and also, now, video cameras. To find out more about the work of OrcaLab, the Free Corky Campaign and the Northern Resident Community of orca, visit www.orcalab.org.

"The Killer Whale Who Changed the World

Paul Spong wasn't the only scientist in the 60s and 70s learning that there was more to these black and white "killers" and indeed many people were inspired by the earlier story of Moby Doll, captured in 1964. Moby Doll, actually later discovered to be a male, was described by Canadian author and playwright Mark Leiren-Smith as "The Killer Whale Who Changed the World."

When Vancouver Aquarium commissioned a killer whale sculpture, a young whale from what we now know as J-Pod was harpooned to use as a model.

Scientists, the media and public gather to view Moby Doll

To the amazement of onlookers, he did not die and two other whales immediately came to his aid. For hours, the young whale tried to pull away from the harpoon and line with constant cries and calls between him and members of the pod. Eventually, however, the harpoon line was tied to a boat and he was slowly led to Burrard Dry Dock in Vancouver where it had been decided to temporarily house him.

To better display this new phenomenon and spend time studying his calls with hydrophones, he was then transferred to a sea pen at an army base near Jericho Beach. This was not without incident as he thrashed about and repeatedly tried to escape. Sadly of course, since then many more have been taken from their families, with nets rather than harpoons, and the response to Moby Doll is part of the reason for this. Fear was being gradually replaced with fascination, awe and wonder, respect and even love. The whales had appeared to talk to each other, and care for each other during capture! Newspapers reported that Moby Doll was "meek", "gentle", "docile!"

Another important lesson was also learned. For 55 days, Moby Doll did not eat, becoming noticeably thinner and weaker. No matter how much horsemeat, offal and dead fish this killer whale was offered, he showed no interest. Only when a live fish was finally offered did he begin to eat again but sadly a month later he was dead from a combination of his injuries, poor water quality and general loss of condition.

Of course, this individual tragedy has been followed by many more deaths during capture and captivity but at least some genuine understanding of the complexities of this species was finally developing. It was the start of a whole new way of looking at "Orca: The Whale Called Killer" as Erich Hoyt titled his excellent book, first published in 1981. Erich is another whose life was profoundly changed by his orca encounters and, having met and chatted with him in 1993, and after reading my signed book, I was more determined than ever to get to Vancouver Island one day.

Killing the Killer!

This growing interest was the start of a marked change in attitudes, at least amongst some people. The species had a reputation as a remorseless killer and was regularly used for target practice by the military. In 1961, local fishermen, who also often shot them, had even persuaded the Canadian Government to kill passing killer whales with a machine gun at Seymour Narrows, part of the "Inside Passage" through Johnstone Strait. The fishermen were sure that thousands of these terrifying creatures were destroying "their" fish stocks.

The gun was actually placed but the plan was halted before it was ever put into action because many local people objected. Some did so out of concern for the animals but mostly because of the very real probability that people walking along the opposite shore might be killed too!

Bigg's Killer Whales

Against this background, of orca capture and fear for fish stocks, the Canadian Department of Fisheries decided to complete a census of the orca population and appointed Dr Michael Bigg as head of marine mammal research. In a world first event, 15,000 questionnaires were sent to fishermen, boaters, lighthouse-keepers and many others, living, working or enjoying the coast. The results of this first survey on July 27, 1971, and the two that followed, showed that not thousands but only around 350 orcas lived in British Columbia.

What was also becoming increasingly apparent to the researchers was that some animals could be identified as individuals by nicks and scratches on

the fin but also by the shape of fins and the pale grey-white "saddle patch" behind it. This was the start of modern orca research, and the pioneering work in photo-ID allowed ongoing studies of the relationships and movement patterns of what became recognised as resident groups of primarily fish-eating orca. It was also discovered that the whales travelled not with mates but with their mothers and other maternal relatives.

This matrilineal hierarchy is reflected in the continuing ID catalogue begun in 1973 and first published in 1987 by the original team which also included Ken Balcomb, Graeme Ellis and John Ford. After Michael Bigg died of leukaemia in 1990, their work continued, as does the catalogue, with other scientists becoming involved over the years.

A marine reserve now bears his name but it was another discovery which increasingly is associated with the Bigg name. As well as the fish-eating resident pods, there were other mammal-eating killer whales, perhaps more worthy of the name, that visited the area. These "transients" as originally titled are today more often known simply as Bigg's orca, after the man who discovered them.

A First Visit to Vancouver Island

I finally achieved my dream, and first visited the home of orca research in 2002, staying close to the base of Stubb's Island Charters at Telegraph Cove. Stubb's were pioneers of whale watching and always carried researchers onboard and this has been continued by their successors, Prince of Whales Whale and Marine Wildlife Adventures.

Neither my camera, nor my photography, were as good back then as they are today, and I have never got around to digitising all the slides, but the image

Orca in Telegraph Cove members.seawatchfoundation.org.uk

gives some idea of this stunning location for whale watching.

I watched this transient or Bigg's orca take a common seal

It was also fascinating comparing with the researchers their orca photo-ID experiences and our own with bottlenose dolphins from a small yacht in the Moray Firth, Scotland. We concluded that their large stable platform, the huge size and relative predictability of their animals and the sheltered waters were something of an advantage!

We saw whales on every trip, sometimes going out twice a day and we also joined a large ketch-rigged yacht for a one-day tour, which sadly no-longer operates. I'll never forget the sight of three male orcas, in line abreast cruising alongside us whilst under sail!

Over three days whilst there, we also saw Bigg'stypes, humpback whales, minke whales, Pacific white-sided dolphins, Dall's Porpoise and harbour porpoises. This truly is one of the best locations in the world for a whale-watching holiday. A short trip to the west coast of the island, Tofino and Ucuelet, also added our first close-up views of gray whales.

A gray whale dives during a trip out from Ucuelet

Vancouver Island again in 2019

When I was offered a contract as onboard speaker / naturalist on Viking Orion, sailing from Vancouver and onwards to Alaska and the Far East, I knew we'd have to spend a few days on Vancouver Island again. I mean, why wouldn't you!

This time, our preferred company was <u>MacKay</u> <u>Whale Watching</u> from Port MacNeill, based a little to the west of Telegraph Cove but with a pick-up service from our remote Hidden Cove accommodation.

Bill MacKay is one of the original whale-watching pioneers and had worked with Dr Michael Bigg and his research team in the 1980s. His vessel Naiad Explorer is a fast, state of the art, and custom designed whale watching platform with ultra-quiet water jet propulsion for minimal impact on the underwater environment.

The Naiad Explorer

The boat, his knowledge, and that of the onboard researchers, makes for a superb and unrivalled experience but our trip with <u>Prince of Whales</u> from Telegraph Cove on their larger vessel was also of a very high standard. Over three days we were to enjoy some amazing encounters with four cetacean species, in the stunning scenic setting of the area around Johnstone Strait.

Our very first trip saw us quickly arrive in the vicinity of a large group of socialising orca, always maintaining a respectful distance and clearly causing no disturbance. Indeed, on a number of occasions individuals and groups chose to come very close to our stationary vessel. The orcas were The same whales were around the next day too and we spent a little more time with them but

primarily from two matrilines, A50 and A54, ancestors of the first pod identified by Michael Bigg and Graeme Ellis in 1972 which they named A1. This first identified whale was Stubbs, a whale with

A72 Bend, of the A50 matriline, descendants of A2 Nicola from A1 Pod

a torn and deformed fin, which led directly to the idea of using photo-ID to help study the whales. Another older adult female member of this A1 pod was A2, or Nicola, and her matriline became A30, led by her daughter Tsitika when she died in 1989. When Tsitika died in 2012, two of her six offspring became matriarchs of new matrilines: A50 Clio and A54 Blinkhorn. Both of these whales are grandmothers and here we were hanging out with their families!

Clio's first born, in 1999, was A72 Bend, and she is one of the most easily recognised individuals due to the significant nick in the forward edge of her fin. She herself gave birth to A108 Jamieson in 2014 and currently is in line to inherit the matriline one day as so far, she has only two brothers, A84 and A99. Her mother is only 37 years old, however, so has plenty of time to add additional members to the family!

Clio's sister, A54 Blinkhorn has 4 offspring, one male, A106 and 3 females, A75, A86, A118. The most recent was born in 2018. A75 has two offspring, A101 and A113 and A86 just one so far, A120 born in 2019. For nearly half an hour we watched them socialising with each other and with whales from the A23 and I4 matrilines in the very place where orca research and photo-ID began with Stubbs and her A1 Pod and a grandmother Clio at least is old enough to remember, A2 Nicola.

transients were in the area, later revealed to be the T55s and T99s, and everyone was keen to see them.

We knew we were getting close when a small pod of Pacific white-sided dolphins appeared suddenly from behind a small island, surfing and surging past us at high speed. We then spotted a large male cruising close to the rocks where common (harbour) seals were hauled out. He disappeared behind the island again and we moved closer and waited.

Suddenly there he was again and the hydrophone briefly recorded a screaming burst of sound following which he was suddenly airborne right in front of us! In a thunderous eruption of spray, he hit the water again and swam slowly away with, we believe, a newly killed seal. This magnificent sight is still etched in my brain and was close enough to send spray on the deck! I wasn't fast enough to catch him on the way up but did shoot the moment he hit the water again!

This magnificent sight will stay with me for ever!

On two occasions we were lucky to also spend some time with the surviving members of the A23 matriline during our trips. During these encounters, I was able to photograph brother and sister, A60 and A43, and also later the whole family group which added A43's daughter A69 and her offspring A95 and A109 to the two older animals in the earlier shot.

A60 (foreground) and A43 (background)

The whole family group

Of course, whilst orcas are the whale watcher's main reason for visiting the area, they are not the only cetaceans to be seen. We saw humpbacks on most of our trips and on one occasion spent a considerable amount of time watching them lunge feeding quite close to us but also trap feeding.

This is a new technique which had only just been identified in this population, but has more recently been described and filmed with Bryde's whales elsewhere in the world. The whale hangs motionless in the water with its mouth wide open and schools of fish swim inside, perhaps attracted by the shade caused by the upper jaw. Whatever the reason, once sufficient prey have gathered, the jaw slams shut too quickly for the fish to realise their fatal mistake.

Sea Watcher

The Ambassador Abroad...continued

A humpback energetically lunge feeding

The more relaxed trap feeding approach

I cannot recommend Vancouver Island strongly enough to the whale watching afficionado. The scenery is stunning and the orca watching opportunities are without match and supported by a wealth of research and photo-ID. There are operators here who can claim to have invented good practice in whale watching, if not the industry itself!

OrcaLab

The sheltered waters make for excellent humpback watching too and we've often seen both Dall's porpoise and Pacific white-sided dolphins. Sightings of minke whales and harbour porpoise are also possible and if you head to the west coast, you'll see gray whales too. And of course, once you tire of all this wonder, Vancouver is one of the main ports for cruises to Alaska, sailing through this cetacean rich paradise and on to new adventures. But that's a story for another day!

Recommended Whale Watching Companies MacKay Whale Watching – based in Port MacNeill but with pickup from other locations Prince of Whales Whale and Marine Wildlife Adventures – based in Telegraph Cove

Further reading

<u>www.orcalab.org</u> – for more about the work of Paul Spong and OrcaLab, the Free Corky Campaign and the Northern Resident Community

<u>https://wildwhales.org/</u> - to learn about the BC Cetacean Sightings Network which developed from the work first started by Dr Michael Bigg

Photo-identification Catalogue and Status of the Northern Resident Killer Whale Population in 2019

Photo-identification Catalogue, Population Status, and Distribution of Bigg's Killer Whales known from Coastal Waters of British Columbia, Canada.

All photos copyright: Robin Petch

We still need your help!

Thank you for joining Sea Watch. Every penny of your regular contribution will go directly to support our work studying and protecting our whales, dolphins and porpoises. As you'll have read in "Conservation Focus" (page 25), due to funding priorities changing due to Covid-19 and an uncertain political and economic future, we urgently need your support. The health and wellbeing of these highly intelligent and sentient creatures should not be forgotten as they are keystone species that shape the health of entire ocean ecosystems.

Whatever you can afford to do to help us study and protect our whales, dolphins and porpoises, please know that we are very grateful. Without funding, our work cannot continue, but of course there are many other ways you can get involved too, for example by downloading and rating the Sea Watcher App (see page 18 for a direct link), by conducting watches for us, and by encouraging like-minded friends and family to join in too.

Find out more at your members' site: http://members.seawatchfoundation.org.uk/

Thank you for your support,

Robin Petch, Sea Watch Ambassador, on behalf of all at Sea Watch

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Look out for the next issue of Sea Watcher – due at the end of June/early July.

Meanwhile, the next monthly bulletin (which will include March's sightings and more details on Orca Watch Online) should be with you by the end of April.