



Wildlife and Countryside Link briefings

Charting Progress 2: The State of UK Seas

June 2011

Wildlife and Countryside Link (Link) brings together over 30 of the UK's leading voluntary organisations united by their common interest in the conservation and enjoyment of wildlife, the countryside and the marine environment. Taken together our members have the support of over 8 million people in the UK.

These briefings are supported by the following organisations:

- Buglife – The Invertebrate Conservation Trust
- The Mammal Society
- Marine Conservation Society
- Royal Society for the Protection of Birds
- Shark Trust
- The Wildlife Trusts
- Whale and Dolphin Conservation Society
- WWF - UK

Overview

The Charting Progress 2 Report (CP2) is the result of a structured and co-ordinated approach to the second assessment of the status of UK seas. Published in July 2010, five years after the first assessment, it aims to illustrate the changes since 2005 and the advances made towards the UK vision of “*clean, healthy, safe, productive and biologically diverse oceans and seas*”. It consists of the main CP2 Report (which is also available in an online format), and two summary documents; an eight page CP2 Overview and a 16 page Government's Commentary on CP2; and is based on four supporting technical “Feeder Reports” covering:

- Healthy and Biologically Diverse Seas
- Clean and Safe Seas
- Ocean Processes
- Productive Seas

CP2 was prepared by the UK Marine Monitoring and Assessment Strategy community, which was established in response to the first Charting Progress Report. The assessment is structured around 11 regional seas covering all UK waters, some of which were subsequently merged to create the eight UK marine regions assessed.

The intention is that CP2 will be used to inform policy decisions on the future management of the UK's seas. It is also expected to form the foundation of the initial assessment required by the EU Marine Strategy Framework Directive, which is due in 2012, and is already informing the evidence base for marine planning in England.

In light of the importance of CP2 for future decision-making on the management of UK seas, Wildlife and Countryside Link (Link) is concerned that the current status of UK seas is accurately recorded, wherever that information is summarised. In a number of specific places, we are aware that the summarised information on CP2 does not accurately reflect the information in the CP2 report or the Feeder Reports.

Consequently, Link has produced the following four briefings to compare the findings and messages of the Healthy and Biologically Diverse Seas Feeder Report, with those used in the CP2 Report, the Overview and Government commentary on the following four sections:

- Cetaceans
- Deepwater fish, sharks, rays, skates and diadromous fish
- Marine benthic habitats
- Waterbirds and seabirds

Wildlife and Countryside Link Briefing: Charting Progress 2 - Cetaceans

The UK's seas support a high diversity of cetacean species. The CP2 Report and the Feeder Report state that of the 28 species recorded, 11 are observed regularly. Of these, harbour porpoise, bottlenose dolphin, white-beaked dolphin, fin whale and minke whale are highly abundant in UK waters.

A recent analysis by Clark *et al.* (2010)¹ on marine protected areas for cetaceans in Scotland, England and Wales identifies critical habitat in UK waters for six species - harbour porpoise, bottlenose dolphin, white-beaked dolphin, Risso's dolphin, minke whale, and short-beaked common dolphin. A further six species are identified by Clark *et al.* (2010) as having insufficient data, but critical habitat is still likely to exist for them in UK waters.

The areas of highest diversity are identified in the CP2 Report as the waters off the continental shelf to the north and west of Scotland and south-west of England. This broadly agrees with the analysis by Clark *et al.* (2010), but these authors identify other critical areas in addition.

Human activities have resulted in serious declines in global and regional populations of cetaceans, including some UK populations. This has led to all species being protected through a range of international and national regulations.

Summary

Both, the CP2 Report and the Feeder Report postulate that all cetaceans found in UK waters form part of much larger populations

which in some cases range over very large areas. As a result, any assessment of the status of cetaceans in UK waters is regarded as being within the context of the wider geographical area.

Of the 28 cetacean species identified in UK waters, only the five most abundant species are assessed as having a favourable conservation status by the CP2 Report and the Feeder Report. For the other species, the status is either unknown or impossible to assess. However, this assessment is at odds with the European Environment Agency's assessment of cetacean populations in north-west European waters, in which only the bottlenose dolphin is considered to have a favourable status.

A major discrepancy exists between the tone and content of the Government's Commentary and the CP2 Report. The Commentary is remarkably upbeat, referring to only three of the eight regions; two, Northern and Southern North Sea, in which populations are 'good' and the third, the Eastern Channel, in which the population is 'recovering'. There is however, no suggestion in the CP2 Report or in the Feeder Report that the Eastern Channel population of cetaceans is starting to recover from decline. In commenting on only three of the eight regions, it fails to reflect the Feeder Report assessment for four of the six regions (for which an assessment was possible), in which there are considered to be many or some problems. Cetaceans in the Eastern Channel are considered to be in a poor condition, and only in a moderate condition in the Western Channel and Celtic Sea, the Irish Sea and the Minches and Western Scotland. For the other two regions (Scottish Continental Shelf and offshore waters north and west of Scotland) the status of cetaceans is unknown, this is particularly disappointing since one of these regions (offshore waters north and west of

¹ <http://www.iucn-uk.org/Portals/0//WDCS%20UK%20MPA%20Report%20ow%20res.pdf>

Scotland) is recognised as one of the most important regions for cetaceans. Furthermore, the CP2 Report recognises that the assessment does not have a high degree of certainty – and the Feeder Report states that the confidence in the expert judgement was low, moderate or unknown.

There are significant differences between the CP2 Report and the evidence and weight of concern in the Feeder Report. In particular, the CP2 Report fails to recognise the threats beyond UK waters which could have an impact on populations spending time in UK waters. For example, whaling and drive fishing in the Faroes, or bycatch in other European fisheries which could be cumulatively adding to the impact of bycatch in UK waters. In addition, although the assessments identify cetacean populations as being in a good condition in the Northern and Southern North Sea, the Feeder Report concludes that current bycatch remains a particular concern in the Southern North Sea, particularly as this has not been fully documented in recent years.

Other issues in the Feeder Report which received little or no attention in the CP2 Report include entanglement, marine litter, prey availability, and pollution. While the CP2 Report identifies that concentrations of pollutants seem to be declining in cetaceans from UK waters, the Clean and Safe Seas chapter identifies that concentrations of chlorinated biphenyls in harbour porpoise blubber have declined only slowly despite controls on the use of PCBs for 30 years. Chlorinated biphenyls can affect neurological, immunological and reproductive processes.

Most important however is the lack of recognition in the CP2 Report given to the potential for cumulative impacts on cetacean populations. It is this cumulative impact that the Feeder Report recognises is of greater concern than any individual pressure and

could affect the long term viability of some species. A further omission in the CP2 Report is the fact that the Feeder Report suggests no future trend predictions are possible due to uncertainties in the relationship and influence of pressures on population dynamics.

Finally, limitations in the use of the Favourable Conservation Status (FCS) 2007 report as the basis for assessment are not accurately portrayed. The European Commission recognised that the lack of, or limits to, information and data on marine habitats and species, meant that the FCS assessment would likely have low confidence levels associated with the assessment. This is not accurately reflected in the CP2 Report or the Feeder report and leads to a misleading confidence in the CP2 Report conclusions.

Conclusions

In light of these findings, Link is of the opinion that the CP2 Report, CP2 Overview and the Government's Commentary seriously mis-report the status of cetacean populations in UK waters. The Government's Commentary is misleading and there are significant differences between the CP2 Report and the evidence and weight of concern in the Feeder Report. In addition, it is Link's view that the basis of the assessment is flawed because the approach of treating UK cetaceans as part of much wider NE Atlantic populations is inappropriate and the basis for the assessments should only be considered "preliminary".

Link is concerned that the urgent need for further action to provide adequate protection for cetaceans and improve the management of activities which have a direct impact on them will not be addressed in the future.

Wildlife and Countryside Link Briefing: Charting Progress 2 - Deepwater fish, sharks, rays, skates and diadromous fish

There are over 330 species of fish found in the waters of the British Isles. The marine fish assessment investigates the changing status of species found in shallow coastal and estuarine waters to those in the deep sea and offshore oceanic waters.

The CP2 Report recognises that the prospects of certain vulnerable fish including deepwater fish species, sharks, rays, skates and diadromous species such as European eel and sturgeon, have continued to deteriorate. However, the CP2 Overview does not mention these significant declines. The Government's Commentary makes reference to the sharp declines in sharks, rays and eels, and acknowledges the gaps in knowledge over the cause of declines in salmon and eel populations.

Deepwater fish, sharks, rays and skates

Detailed assessments have been carried out for the eight regions (presented in the Feeder Report), using a range of fish surveys and time series data to assess changes over the past 20 years. There are however, a number of gaps in the assessment, particularly for deep-sea fish and open water pelagic fish, including sharks. The information available for deep-sea communities can be considered patchy at best with the best studied deep-sea communities around the UK found in the Porcupine Seabight and Rockall Trough. Since the first Charting Progress Report a regular monitoring programme has been established for deepwater fish assemblages off the west of Scotland and around Rockall.

Diadromous fish (salmon, eels, shads, sturgeon, lampreys)

Diadromous fish, which migrate between freshwater and the marine environment, such as salmon, eels, shads and lampreys, form one component of the fish assessment of CP2, but again the data available for diadromous fish is considered piecemeal.

Summary

Both the CP2 Report and the Feeder Report agree that vulnerable fish species, including deepwater fish species, sharks, rays, skates, and diadromous species, have continued to deteriorate, as demonstrated by the steady downward trends of many populations. The overarching reason for this deterioration is not clear, but a number of threats could be contributing, including; changes in oceanic conditions, overexploitation, freshwater habitat destruction, contaminants, and parasitic infections.

The CP2 Report fails to make any specific reference to trends in deepwater fish, sharks, rays, skates and diadromous fish. It does make reference to the inherent vulnerability of species such as deepwater fish, sharks and rays to the pressures of fishing. The Feeder Report also reflects this vulnerability and recognises that climate change impacts are poorly understood and are sensitive to fluctuations.

The CP2 Report recognises a 70% decline in the number of elvers returning to English and Welsh rivers. There is concern that climate change may adversely affect migratory fish, as environmental variables may be used as migratory cues. Both the CP2 and Feeder Reports acknowledge that there are still large gaps in our knowledge concerning the decline in diadromous species and these gaps could be key in promoting stock recovery. There has however been an increase in returning salmon

and sea trout to some rivers in Britain, thought to reflect improvements in water quality in these regions, but populations in many rivers are still in decline.

Deepwater fish, sharks rays and skates are extremely vulnerable to fishing, as reflected by global decreases. The populations of many open water shark species, as well as several large rays and skates, have decreased significantly in the North Atlantic and the common skate has completely disappeared from the continental shelf.

The CP2 Overview consistently fails, and in places the CP2 Report fails, to accurately reflect the findings of the Feeder Report. The CP2 Report, in line with the Feeder Report, does highlight the lack of knowledge of deepwater fish, sharks, rays, skates and diadromous fish, and where trends are most uncertain, stresses the need for stricter management of these species. However, these data gaps and subsequent management recommendations are absent from the Overview.

There is little reference to the impacts of bycatch on populations of these species. Longline fishing and trawling can catch significant numbers of these species which are vulnerable even to minimal fishing effort. Other issues which appear to be overlooked are entanglement, marine litter, prey availability and pollution. The CP2 Report does state that the improved water conditions of some rivers may be increasing the return of some diadromous species. Whether or not pollution is hindering the return to other rivers is not considered.

Conclusions

Although this is the most comprehensive assessment of fish communities in the UK ever conducted, it is recognised by both Reports that there are significant gaps in data,

which leads to uncertainty in the assessment. The CP2 Report recognises that the prospects of certain vulnerable fish have continued to deteriorate; however, the CP2 Overview does not mention these significant declines.

The upbeat tone of CP2 in respect to its fisheries assessment does not reflect the lack of knowledge or the declines that are being identified in the most vulnerable species assessed. Importantly, many of these species are top predators and/or commercially exploited, whilst also in significant decline.

Link is concerned that the CP2 Report and Overview fail to adequately reflect the findings of the Feeder Report, and are subsequently concerned that the urgent need for further action to provide appropriate protection for sharks, rays, skates and diadromous fish, and improve the management of activities which have a direct impact on them, will not be addressed in the future.

Wildlife and Countryside Link Briefing: Charting Progress 2 - Marine benthic habitats

The UK supports a wide range of marine benthic habitats and associated biodiversity. Six broad-scale habitats were identified for the CP2 assessment:

- Intertidal rock
- Intertidal sediment
- Subtidal rock
- Shallow subtidal sediments
- Shelf subtidal sediments
- Deep-sea habitats

The Feeder Report concludes that on the whole, sediment habitats are more extensively degraded than rocky habitats, although many biogenic reef and some rocky reef habitats have been severely damaged.

There is a greater variety of pressures on marine benthic habitats in the south of the UK; in the north pressure is largely associated with fishing activities.

Inshore habitats are generally impacted by a greater variety of pressures than those habitats further offshore.

Loss of habitat, hydrological changes and, to a lesser extent, pollution and nutrient enrichment are identified as the main causes of damage and degradation in the intertidal zone.

Demersal and benthic-towed fishing gear is considered the main cause of damage and degradation in subtidal habitats.

Summary

Only one, or arguably two, of the six broad-scale habitats (intertidal and subtidal rock) have experienced limited impact.

The CP2 and Feeder Reports refer to the trends in conditions of habitats (over the past 10 years), as well as the current status of habitats (in comparison to former natural conditions) as a result of anthropogenic activity.

The assessment of the *trend in condition* of marine habitats over the past 10 years shows 56% to be deteriorating, while only 6% is improving, with 38% considered stable.

A detailed assessment of the *current status* of the six broad-scale habitats across eight sea 'regions' is provided in the Feeder Report. This concludes that of 41 regional assessments (six habitat assessments for each of the eight regions, minus seven for which trend information was not available), 18 (44%) are considered to have been little changed due to anthropogenic influences. Five (12%) were shown to have been moderately changed, and the remaining 18 (44%) were shown to have been subject to a high degree of change. However, for the habitats assessed as being subject to little or moderate change, 61% contained sub components which have been subject to a high degree of impact, with over 25% of their area assessed as '*worst case scenario*' and considered unlikely to recover in the foreseeable future.

Regional assessments of the condition of sediment habitats indicate significant impacts in a number of regions, with over 25% of the area of the habitat impacted by one or more activity.

From the information presented in the CP2 Report and the Feeder Report, the following

conclusions are appropriate for marine habitats:

Impacts range from coastal squeeze, adding to historical land reclamation in intertidal sediments, to beam trawling and scallop dredging affecting function and structure of shallow subtidal sediments. Demersal fishing is identified as a pervasive source of disturbance affecting shelf subtidal sediments.

Although subtidal rock areas are generally considered to be less impacted than other habitats, some areas and associated communities have been permanently damaged or removed by mobile fishing gear. The remaining substratum has a reduced structural complexity and is less diverse.

Extensive areas of biogenic reefs may be damaged or destroyed as a result of fishing or aquaculture activities, and some biogenic reefs have already been permanently lost.

Fishing activity, particularly trawling is considered to be a significant threat to deep sea habitats.

Further localised losses of some habitats is likely to occur in the future as a result of development for renewable energy (wind, wave and tidal) and container port facilities and marinas at the coast.

While the intensity of pressure is anticipated to remain relatively stable for the next one to two decades, it is not clear what additional pressure will result from climate change, e.g. establishment and range extension of non-native species, coastal squeeze as sea levels rise, changes in seawater salinity and temperature.

Conclusions

In light of these findings, Link is of the opinion that the CP2 Overview, which states *“human and natural pressures have impacts on many of our habitats and species”*, and the conclusion of the Government’s Commentary that *“intertidal and nearshore habitats are generally in reasonable condition”*, are seriously misleading. Albeit the second part of the Commentary statement is accurate in recognising that *“seabed habitats in large areas of the North Sea, the Western Channel / Celtic Seas and the Irish Sea have been impacted by mobile fishing gear.”*

Link is concerned that the CP2 summary documents fail to reflect the findings of the Feeder Report and CP2 Report, and subsequently, the urgent need for further action to provide adequate protection for marine benthic habitats and improve the management of activities which have a direct impact on them, will not be addressed in the future.

Wildlife and Countryside Link Briefing: Charting Progress 2 - Waterbirds and seabirds

The UK's coastal and marine environment supports internationally important numbers of birds with more than 100 species regularly using marine areas in the UK for feeding, loafing, roosting, moulting, and terrestrial sites for breeding. The CP2 assessment is divided into waterbirds which frequent coastal wetlands, estuaries and nearshore waters, and seabirds which spend much of their lives in nearshore and offshore waters, returning to land to nest.

The CP2 Report recognises that many waterbird and seabird populations have increased in size over the past century since the mid-1970s. However, it and the Government's Commentary fail to include the information from the Feeder Report, attributing this increase to the introduction of greater protection from hunting and persecution in the UK and overseas, enabling recovery of populations from historically low numbers. Since the mid-1990s declines are evident in a number of populations of wintering waterbirds and breeding seabirds, suggesting that external pressures are once again influencing marine bird populations. Climate change, habitat loss and changes in food availability are cited as the chief causes.

The CP2 Report recognises that the marine bird assessment is necessarily limited by the available data, especially in the effects of many of the pressures they are subjected to. However, this point does not come across in the summarised conclusions.

In light of these findings, Link is of the opinion that the overall summarised message on the current condition and status of waterbird and seabird populations is misleading, with recovery from historic lows presented as

increases and the recent declines in many populations underplayed. In addition, the likely existing and future impact of climate change is not given sufficient profile in the summaries.

Seabirds

The CP2 Report concludes that although there was a significant increase in breeding seabirds from the late 1960s to the end of the 1990s (4.5 million to 7 million), since Charting Progress 1 (2005) the number has declined by around 9%. This is somewhat misleading as the decline has actually taken place over the past decade. It should also be made clear that 9% is not trivial – representing as it does over 600,000 breeding seabirds. Only Northern gannet and great skua have sustained a positive trend since 1969 when comprehensive monitoring started, while herring gull and roseate tern numbers have declined in the same period by more than 50%. The mean breeding success of 21 seabird species was at its lowest levels since the mid-1980s in 2004, 2005 and 2007, with the species most acutely affected including black-legged kittiwakes and common guillemots, but also Atlantic puffins, razorbills and Northern fulmars.

The Feeder Report recognises that of seven species of seabirds which have declined between 2000 and 2008, numbers are down by:

- 33% for European shag
- 14% for Arctic skua
- 69% for herring gull, and
- 40% for black-legged kittiwake

As seabirds do not breed until they are three to nine years old, it is anticipated that the breeding numbers of those species experiencing difficulties now are more likely

to decline than stay stable. This important assessment is not conveyed in the summaries.

The CP2 Overview regional summary species assessment shows three regions with deteriorating seabird populations, one region with stable seabird populations, and three regions with increasing seabird populations. Yet the Feeder Report pressure assessment concludes that there is only one region where seabird populations appear to be increasing, three regions which can be considered stable and three regions experiencing declines greater than 10%. Obviously the CP2 Overview is plainly wrong in this case.

Waterbirds

The CP2 assessment showed that for 32 out of 57 species which winter or migrate through UK marine areas, numbers doubled between the mid-1970s and mid-1990s, but since then many have declined. As with seabirds, this increase is in fact recovery from historic lows resulting from hunting and persecution. Some species of diving duck and estuarine wader declined dramatically in 2006/07 when compared with 1975/76, resulting in:

- 54% fewer dunlin
- 43% fewer goldeneye, and
- 28% fewer bar-tailed godwit

Similar declines have been seen both within and outside of protected areas. The five most significant pressures are identified as climate change, contamination by hazardous substances, removal of species (target and non-target), habitat damage and habitat loss.

The Feeder Report recognises that the numbers of waterbirds wintering or migrating through marine areas increased between the mid-1970s and mid-1990s, but that numbers have declined “*slightly*” since then. While the trends are similar for most species, i.e. the

mean abundance remains 85% higher than in 1975/76, the increase in abundance masks serious declines in some diving species and estuarine waders.

The Feeder Report concludes that trends for wintering numbers of three wildfowl and six waders have been in decline since at least the early 1990s with mallard and dunlin at their lowest numbers since 1975/76. Numbers of a further eight species have declined since the late 1990s with pochard, goldeneye and red-breasted merganser all at their lowest numbers since 1975/76.

Only 37.5% of waterbirds assessed remain stable or have increased since the late 1990s and the trend for more than half of the waterbirds assessed over the past decade is downward.

There appears to be a serious discrepancy between the Feeder Report regional pressure assessments and the CP2 Overview regional summary species assessments. It is clear that these two assessments are not actually showing the same thing, but it is not clear how the assessment for waterbirds (or seabirds) shown in the CP2 Overview was reached. This assessment is not summarised in the CP2 Report or the Feeder Report and appears to be inaccurate; it shows that there is improvement in waterbird populations in all five regions included in the summary, with few or no problems experienced in four of the five regions and some problems in the other region. This is at odds with the material presented in the CP2 Report and the Feeder Report.

Conclusions

The tone of the Government’s Commentary is misleading. It focuses on the fact that most seabird and waterbird populations have increased in the latter half of the 20th century, but fails to attribute this to recovery from

historic lows. Moreover, in the past decade, which is presumably the most critical time in terms of implementation of Government policies to protect the environment and wildlife, the trend has reversed with 56% of marine bird populations assessed now exhibiting declines and only 44% remaining stable or increasing. This suggests that although much was done to improve protection of waterbirds and seabirds some time ago to deal with historic pressures such as hunting, insufficient action is being taken now, as new threats have come to the fore.

Link is concerned that the CP2 summary documents fail to reflect findings of the Feeder Report and subsequently, the urgent need for further action to provide adequate protection for waterbirds and seabirds and improve the management of activities which have a direct impact on them will not be addressed now or in the future.

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