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# The Status and Distribution of Cetaceans in the Black Sea and Mediterranean Sea

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**Cover Photo Caption:**
A bottlenose dolphin leaping on the bow wave of a large ocean freighter in the Strait of Gibraltar, 27 March 2005.

# Harbour porpoise (*Phocoena phocoena relicta*)
# Black Sea subspecies

## Taxonomy

### Family

Phocoenidae Gray, 1825

### Genus

*Phocoena* G. Cuvier, 1817

### Species

*Phocoena phocoena* (Linnaeus, 1758)

### Subspecies

*Phocoena phocoena relicta* Abel, 1905

### Relevant Common Names

| | |
|---|---|
| EN | [Black Sea] harbour porpoise |
| BG | morska svinya, mutkur |
| KA | azovka, zgvis gori |
| EL | φώκαινα (fókaina) |
| RO | marsuin, focena, porc de mare |
| RU | [chernomorskaya obyknovennaya] morskaya svinya, azovka ([черноморская] обыкновенная морская свинья, морская свинья, азовка) |
| TR | mutur |
| UK | [chornomors'ka zvychaina] mors'ka svynya, azovka, pykhtun ([чорноморська] звичайна морська свиня, азовка, пихтун) |

## Assessment Information

Endangered (EN A1d+4c,d,e)

### Year Assessed

2006

### Assessor(s)

Alexei Birkun, Jr. and Alexandros Frantzis

### Evaluator(s)

IUCN/ACCOBAMS Workshop on the Red List Assessment of Cetaceans in the ACCOBAMS Area (Monaco, 5-7 March 2006)

### Justification

The Black Sea harbour porpoise, *P. p. relicta*, qualifies for listing as Endangered (EN) based on criteria A1d and A4c,d,e. The basis for inferences and suspicions leading to that assessment is summarised below.

The estimated generation time is around 9-10 years (see main text of workshop report), thus three generations for the Black Sea harbour porpoises would be 27-30 years.

There are no estimates of unexploited or present total population size, although the available information suggests that present abundance is at least several thousands.

The following information from the last three decades is relevant to the proposed classification. However, it is important to note that very high levels of direct and incidental mortality occurred for a long period before then (from the 1830s and throughout the 20th century) and this undoubtedly would have dramatically reduced the population prior to the 1970s (IWC, 2004).

(1) Large directed takes occurred during the years 1976-1983 before the ban on small cetacean hunting was declared in Turkey in 1983. Within that period, the total number of harbour porpoises killed was at least 163,000-211,000. Illegal direct killing of unknown numbers continued in some parts of the Black Sea until 1991.

(2) Regionally extensive incidental mortality of porpoises in bottom-set gillnets is roughly estimated to have been in the thousands annually through the 1980s. The scale of this mortality almost certainly increased in the 1990s-2000s owing to the rapid expansion of illegal, unreported and unregulated fishing in the Black Sea.

(3) A major mass stranding/mortality event occurred in the Azov Sea in August 1982 as a result of an explosion at a gas-extraction platform. More than 2,000 porpoises were found on shore following this event.

(4) Two other mass stranding/mortality events occurred in 1989 and 1990, attributed to the combined effects of parasitic and bacterial infections. Although difficult to quantify, the mortality of porpoises is believed to have been in the thousands.

(5) Periodically (most recently in November 1993), natural mass mortality events occur as a result of ice entrapment in the Azov Sea. Although no direct estimates are available, these can result in the deaths of several tens or more animals.

(6) There has been general and ongoing degradation of the Black Sea environment (including harbour porpoise habitat) and biodiversity during the 1970s-2000s, with perhaps the most serious period in the late 1980s–early 1990s due to a combination of overfishing, water pollution, eutrophication, demersal fish die-offs caused by hypoxia and the population explosion of harmful alien species. This degradation almost certainly has resulted in a decline in the abundance and quality of harbour porpoise prey.

(7) The harbour porpoise was considered extinct in the Mediterranean Sea until 1997, when a specimen stranded alive in the northern Aegean Sea; a few further strandings and sightings have occurred in that limited area since then.

EN: A1d. A reduction in population size of 70% over the past 30 years is inferred based on paragraphs (1) and (3) above, i.e. the directed takes and, to a lesser degree, the accident in 1992 (considered ‘actual exploitation’ in the context of IUCN criteria). These causes were clearly reversible and understood and they have ceased. Despite the absence of abundance estimates for the initial part of the 30-year period, the suspected decline of 70% is based on inferences from a crude extrapolation based on the annual removal levels in the Turkish fishery: a reduction of 70% implies that the population in 1976 must have been at least 233,000-302,000, whereas a reduction of 50% (threshold for Vulnerable) would require a population size of at least 326,000-422,000. The latter seems unrealistic given the duration and intensity of past exploitation.

EN: A4c,d,e. A reduction in population size of >50% over a 30-year period that includes both the past and the future is inferred based on the above paragraphs except (1) and (3). During this period, although direct killing has ceased, the other known or suspected causes of decline (bycatch, habitat degradation, prey depletion, epizootics and adverse climatic circumstances) have not ceased.

## Distribution

Range of the Black Sea harbour porpoise, *P. p. relicta* Abel, 1905 (inset the North Aegean Sea). Note that there is no confirmed information from the Dardanelles Straits. There are rare reports from some coastal lagoons and estuaries.


### Country Names

| Territorial waters of | Native - presence confirmed | Native – possibly present | Visitor | Possibly Visitor | Vagrant | Possibly vagrant | Other |
|---|---|---|---|---|---|---|---|
| Bulgaria | X | | | | | | |
| Georgia | X | | | | | | |
| Greece | X* | | | | | | |
| Romania | X | | | | | | |
| Russia | X | | | | | | |
| Turkey | X | | | | | | |
| Ukraine | X | | | | | | |

* Possible separate subpopulation in the Aegean Sea.

## Summary Documentation

### Biome

Marine. On rare occasions Black Sea harbour porpoises occur in estuarine and fluvial environments.

### Major Habitat(s)

Circumlittoral area over the continental shelf (usually more than 6 m but less than 200 m deep).
Open sea.
Shallow sea (usually less than 6 m deep; includes sea bays and straits).

Isolated instances are known of Black Sea harbour porpoises visiting estuaries of big rivers including their deltas, big rivers proper and their confluents, coastal brackish and saline lagoons, and freshwater lakes connected with the sea by rivers.

### Taxonomy

The Black Sea harbour porpoise is recognized as a subspecies (*P. p. relicta*) with morphological (Tzalkin 1938) and genetic differences from *P. phocoena* populations elsewhere in the world (Rosel *et al*. 1995, 2003). Black Sea and Aegean harbour porpoises have identical mtDNA sequences in the hypervariable control region (Rosel *et al*. 2003) but it is possible that they represent separate subpopulations of the

subspecies.

### Geographic Range

(a) The entire Black Sea area, including territorial waters and exclusive economic zones of Bulgaria, Georgia, Romania, Russia, Turkey and Ukraine; (b) internal waters of Ukraine in the Black Sea, including the Dnieper-and-Boug Liman (firth) and Karkinitsky Bay; (c) internal waters of Russia and Ukraine, represented by the Kerch Strait and Azov Sea; (d) internal waters of Turkey, including the Bosphorus Strait, Marmara Sea and, possibly, Dardanelles Straits; (e) Greek and, probably, Turkish territorial waters in the northern Aegean Sea; and (f) lagoons, estuaries, rivers and lakes located mainly on the northwestern coast of the Black Sea and round the Azov Sea in Ukraine and Russia.

### Population

The total population size is unknown. However, there are recent abundance estimates for parts of the range, including the Azov Sea, Kerch Strait, and Russian and Ukrainian territorial waters in the Black Sea (see Table 1). These estimates suggest that population size is at least several thousands or possibly even the low tens of thousands. Population structure within the Black Sea is likely, with three or more subpopulations including ones that spend the warm period of the year in geographically and ecologically different areas, *e.g*. Azov Sea, northwestern Black Sea, Sea of Marmara or Turkish Straits System (TSS) as a whole (including Sea of Marmara, Bosphorus and, possibly, the Dardanelles). Another subpopulation (most likely the smallest) is thought to be resident in the northern Aegean Sea of the Mediterranean.

### Population Trend

↓ – until 1983 (massive directed killing reduced the population)
↓? – 1983–2006 and beyond (the population presumably is still declining as incidental mortality and habitat degradation worsen)

## Detailed Documentation

### Range and Population

**Range:** The subspecies' range includes the Black Sea proper, Azov Sea, Kerch Strait (*e.g*., Tzalkin 1938), Marmara Sea, Bosphorus Strait (Öztürk and Öztürk, 1997), northern Aegean Sea (Frantzis *et al*. 2001) and also, very likely, the Dardanelles Straits (Harun Guclusoy, 2006, pers. comm. to Frantzis) connecting the Marmara and northern Aegean Seas. The Black Sea population is completely isolated from the nearest *P. phocoena* population in the northeastern Atlantic by a wide range hiatus in the Mediterranean Sea (Frantzis *et al*. 2001). Although there is no agreement on when it happened (Kleinenberg 1956; Frantzis *et al*. 2001), it is clear that the species came to the Black Sea via the Mediterranean which, therefore, must have had its own harbour porpoise population in the past.

The range of the Black Sea subspecies includes territorial waters and exclusive economic zones of Bulgaria, Georgia, Romania, Russia, Turkey and Ukraine in the Black Sea; internal waters of Ukraine in the Black Sea (including the Dnieper-and-Boug Liman and Karkinitsky Bay); internal waters of Russia and Ukraine in the Azov Sea and Kerch Strait; internal waters of Turkey (TSS, including the Bosphorus Strait, Marmara Sea and, possibly, the Dardanelles); Greek territorial waters in the northern Aegean Sea (Thracian Sea, Kavala Gulf, Strymonikos Gulf, Agiou Orous Gulf, and Thermaikos Gulf); and possibly Turkish territorial waters of the northeastern Aegean Sea, at the exit of the Dardanelles Straits. Occasionally, harbour porpoises have been sighted in the Danube, Dnieper, Don and Kuban rivers, their estuaries, deltas and tributaries (*e.g*., in the Danube in 1984-1989 and 2003 or in the Ingulets, a confluent of the Dnieper, in 1999), and coastal freshwater, brackish and saline lakes and lagoons including the Yalpug and Sivash lakes, Berezansky and Grigorievsky lagoons, Tendrovsky, Yagorlytsky and Jarylgachsky bays, and the Gulf of Taganrog (Tzalkin 1940a; Geptner *et al*. 1976; Birkun 2006). All of these sites are situated in Ukraine and Russia, on the northern and northwestern coasts of the Black Sea and round the Azov Sea.

The population of *P. p. relicta* may consist of three or more subpopulations including those that spend much of the year in geographically and ecologically different areas, e.g. the Azov Sea, northwestern Black Sea, Sea of Marmara and northern Aegean Sea. The Bosporus Straits, the Sea of Marmara and the Dardanelles

Straits serve as conduits between the Black and Aegean Seas. Water flow at the surface is into the Aegean, from the Black Sea (Poulos *et al.* 1997). If porpoises were to leave the Black Sea, the conditions in the northern Aegean Sea (as compared to other parts of the Mediterranean) would remain similar to those of the Black Sea. The period of greatest similarity would be February and March (Poulos *et al.* 1997) and five out of the nine records from the Aegean occurred from mid January to the end of March (3 were in summer and 1 in October; all age classes have been found in the small available sample). Further work is needed to determine whether the animals found in the northern Aegean Sea represent a separate resident subpopulation.

**Abundance:** Total population size is unknown and therefore a synoptic region-wide survey is essential. Past Black Sea region-wide estimates based on strip transect surveys carried out in the USSR (1967-1974; Zemsky and Yablokov 1974) and Turkey (1987; Çelikkale *et al.* 1989) have been shown to be fundamentally flawed for a number of methodological and analytical reasons, making their use as indicators of absolute abundance unwarranted (e.g. IWC, 1992; Buckland *et al.* 1992). Consideration needs to be given as to whether, despite the identified problems, any of the data from those earlier surveys can be used in comparisons with data from future well-designed surveys to infer population change. Other estimates also suffered from inadequacies of survey design, record keeping and statistical analysis. Nevertheless, it was generally recognized (e.g. Tzalkin 1940a; Kleinenberg 1956; Geptner *et al.* 1976; Yaskin and Yukhov 1997) that during most of the 20th century, the abundance of harbour porpoises in the Black Sea was higher than that of bottlenose dolphins (*Tursiops truncatus ponticus*) and lower than that of common dolphins (*Delphinus delphis ponticus*).

Line transect surveys have been conducted recently to estimate harbour porpoise abundance in different parts of the range. In particular, aerial surveys were conducted in the Azov Sea, Kerch Strait (2001, 2002) and northeastern shelf area of the Black Sea (2002); vessel-based surveys were performed in the Kerch Strait, the entire 12-mi-wide zone of the Ukrainian and Russian Black Sea (2003), Georgian territorial sea (2005), and central part of the Black Sea between the Crimea peninsula, Ukraine, and Sinop province of Turkey (September–October 2005). Results of those surveys (Table 1) suggest that present total population size is at least several thousands and perhaps as much as 10,000-12,000.

**Table 1 – Line transect surveys and harbour porpoise abundance estimates in selected portions of the Black Sea**

| Surveyed area and observation effort | Observation platform | Year | Research period | Available uncorrected abundance estimates | References |
|---|---|---|---|---|---|
| Azov Sea in total, 40,280 Km$^2$/2,735 km | Aircraft | 2001 | July, 4 days | 2,922 (1,333–6,403; 95% CI) | Birkun *et al.* (2002) |
| Southern Azov Sea (within above area), 7,560 km$^2$/413 km | Aircraft | 2001 | July, 2 days | 871 (277–2,735; 95% CI) | Birkun *et al.* (2003) |
| Southern Azov Sea (the same area), 7,560 km$^2$/716 km | Aircraft | 2002 | August, 1 day | 936 (436–2,009; 95% CI) | Birkun *et al.* (2003) |
| Kerch Strait in total, 890 km$^2$/353 km | Aircraft | 2001 | July, 1 day | not available (too small sample size: 5 sightings, 12 animals) | Birkun *et al.* (2002) |
| Kerch Strait in total, 890 km$^2$/353 km | Aircraft | 2002 | August, 1 day | not available (too small sample size: 4 sightings, 4 animals) | Birkun *et al.* (2003) |
| Kerch Strait, 862 km$^2$/310 km | Vessel | 2003 | August, 6 days | 54 (12–245; 95% CI) | Birkun *et al.* (2004) |
| NE shelf area of the Black Sea, 7,960 km$^2$/791 km | Aircraft | 2002 | August, 3 days | not available (too small sample size: 8 sightings, 15 animals) | Birkun *et al.* (2003) |
| NW, N and NE Black Sea within Ukrainian and Russian territorial waters, 31,780 km$^2$/2,230 km | Vessel | 2003 | September-October, 18 days | 1,215 (492–3,002; 95% CI) | Birkun *et al.* (2004) |
| SE Black Sea within Georgian territorial waters, 2,320 km$^2$/211 km | Vessel | 2005 | January, 3 days | 3,565 (2,071–6,137; 95% CI) | Birkun *et al.* (2006) |
| Central Black Sea beyond territorial waters of Ukraine and Turkey, 31,200km$^2$/660 km | Vessel | 2005 | September-October, 8 days | 8,240 (1,714–39,605; 95% CI) | Krivokhizhin *et al.* (2006) |

**Population Trend** In the 20th century, the number of Black Sea harbour porpoises was dramatically reduced by massive direct killing for the cetacean-processing industry that continued until 1983 (e.g. IWC 2004). The numbers of animals taken were not recorded accurately; much of the catch data was recorded as numbers of animals undifferentiated to species (all three Black Sea small cetacean species were targeted) and by wet weight aggregates (e.g. pounds or tons of dolphin/porpoise landed). However, it can be inferred that the population size of *P. p. relicta* was reduced due to the direct kills (totalling

some hundreds of thousands) by the time the total ban on dolphin hunting was enforced in the Black Sea region (see section "Threats"). It is strongly suspected that during the subsequent period from 1983-2006, not only did the population not recover but it declined markedly, primarily due to large-scale mortality in bottom-set gillnets (Birkun 2002a). In addition, there are other ongoing threats including human-induced habitat degradation (see "Threats" below). These threats are poorly managed in most Black Sea countries and therefore further decline of the population seems likely.

## Habitat and Ecology

Harbour porpoises inhabit mainly shallow waters (0–200 m deep) over the continental shelf around the entire perimeter of the Black Sea, although they also occur quite far offshore in deep water. For instance, in late September – early October 2005, sizeable groups were observed in the central Black Sea, beyond the shelf edge some 38–215 km from the nearest coast in waters 450–2,170 m deep (Krivokhizhin *et al*. 2006). During warm periods they occur in the Azov Sea and Kerch Strait (Tzalkin 1940a; Kleinenberg 1956; Birkun *et al*. 2002) and in the Marmara Sea and Bosphorus (Öztürk and Öztürk 1997). Both of these small seas (as well as the northwestern Black Sea shelf zone) may represent geographically disjunct breeding-calving-feeding areas while the straits (Kerch and Bosphorus) connecting the seas serve as migration corridors.

Harbour porpoises undertake annual migrations, leaving the Azov Sea (Tzalkin 1938) and northwestern Black Sea (Birkun 2006) before winter and returning in spring. Such movements also may occur between the Black Sea and Marmara Sea; in the latter (along with the Bosphorus) there are no records for January-March (Öztürk and Öztürk 1997). The primary wintering areas are in the southeastern Black Sea (Birkun *et al*. 2006) including southern Georgian territorial waters and (perhaps) eastern Turkish territorial waters. These are also the well-known wintering grounds of Black Sea and Azov Sea populations of the anchovy (*Engraulis encrasicolus ponticus*) – a principal prey species for harbour porpoises during the cold season (Kleinenberg 1956). Most of the Black Sea porpoise population may congregate there every year. In January 2005 the density estimated for Georgian waters was 1.5 porpoises per $km^2$ (Birkun *et al*. 2006), i.e. 6–39 times higher than densities reported for any other Black/Azov Sea area surveyed in summer or autumn.

The mean group size varies from 1.4 to 7.7 in different areas (Birkun *et al*. 2002, 2003, 2004; Krivokhizhin *et al*. 2006) although during their seasonal migration, animals may remain for a few days at different sites (usually bays with abundant fish) forming dense aggregations of some hundreds of individuals, e.g. off the southern coast of Crimea in December-January 1994 (Laspi Bay), March 1995 (near Cape Meganom) and April 2005 (between Cape Aya and Cape Fiolent) (Birkun and Krivokhizhin, unpubl. data). Sometimes, early and rapid ice formation, arising immediately after an "Indian summer", can prevent animals leaving the Azov Sea and cause mass mortality due to ice entrapment (Kleinenberg 1956). The last recorded die-off of this kind occurred in November 1993 (Birkun and Krivokhizhin 1997); the number of animals could not be estimated. Black Sea harbour porpoises do not avoid waters with low salinity and high turbidity; they may occur in brackish bays and lagoons, and visit rivers and estuaries (all records occurring at warm times of the year).

The ecology of Black Sea harbour porpoises may be considered unusual. It reflects the high degree of geographical isolation of their habitat, relatively low water salinity, significant seasonal fluctuations of water temperature, and large amount of anoxic waters saturated with hydrogen sulphide, $H_2S$, below 100-250 m. At least 14 fish species have been recorded in the stomach contents (Tzalkin 1940a,b; Kleinenberg 1956; Tomilin 1957; Tonay and Öz 1999; Krivokhizhin *et al*. 2000; Birkun 2006), of which four are considered as the most important prey: anchovy, sprat (*Sprattus sprattus phalaericus*), whiting (*Merlangius merlangus euxinus*) and gobies (Gobiidae).

## Threats

Until 1983, unregulated hunting was the primary threat (IWC 1992, 2004). Very large numbers of harbour porpoises, as well as other cetaceans, were taken during the 20th century by all Black Sea countries for a variety of industrial uses (Kleinenberg 1956; Tomilin 1957). Although the total number killed is unknown, it may have been as many as 4 or 5 million for all species combined (e.g. see review in Smith 1982). It is widely accepted that all Black Sea cetacean populations, including the harbour porpoises, were badly reduced by the directed fishery (IWC 1983, 1992, 2004). Catches of harbour porpoises were numerically fewer than those of common dolphins until 1964 when harbour porpoises became predominant (Smith

1982). From 1976 to 1981, harbour porpoises were believed to account for 80% of the total catch of cetacean fisheries in Turkey, with 34,000 to 44,000 taken annually (IWC 1983). At least since 1991, there has been no evidence of illegal directed takes although such takes had been reported before that time (IWC 1992).

At present, incidental mortality in fishing nets is the most serious threat (*e.g.*, Birkun 2002a). Although all three Black Sea cetacean species are bycaught, the majority (95%) of recorded cetacean entanglements are of porpoises. Unfortunately, absolute numbers of removals cannot be estimated from the available data. However, there are indications that the annual level of harbour porpoise bycatch may be in the thousands. Almost all (>99%) of the porpoises are caught in bottom-set gillnets for turbot (*Psetta maeotica*), spiny dogfish (*Squalus acanthias*) and sturgeon (*Acipenser* spp.). The peak occurs from April–June during the turbot season in the Azov Sea and Kerch Strait and throughout the shelf area of the Black Sea, including territorial waters of all six riparian countries. Almost all (99.9%) recorded bycatches are lethal (BLASDOL 1999). Illegal, unreported or unregulated fishing is widespread in the Black and Azov Seas and a significant proportion of the bycatch may occur in such operations.

An explosion at a gas-drilling platform in the Azov Sea in August 1982 resulted in the deaths of over 2,000 porpoises (Birkun 2002b).

Large-scale pelagic and small-scale coastal fisheries may affect Black Sea harbour porpoises indirectly by reducing their prey populations and degrading their habitat. Primarily, this relates to anchovies and sprats in the Black Sea and gobies in the Azov Sea. In particular, overfishing, eutrophication and the population explosion of an introduced predator, the ctenophore *Mnemiopsis leidyi*, led to a dramatic (8 to 12-fold) decline of sprat and anchovy abundance in the early 1990s (Prodanov *et al.* 1997). This reduced prey availability coincided with two mass mortality events (in 1989 and 1990) that, although they affected all three cetacean species, primarily affected porpoises (Birkun 2002c). Severe pulmonary nematodosis, caused by *Halocercus* spp. and complicated by bacterial super-infection, was recognized as a primary cause of the deaths, which were mainly of young animals. For other species, it has been hypothesised that malnutrition along with immuno-suppression associated with PCB contamination provokes or intensifies the effects of epizootics (e.g. Mediterranean striped dolphins; Aguilar and Borrell, 1994). Reported levels of DDTs and HCHs in Black Sea harbour porpoises are higher than those in conspecifics elsewhere in the world (Tanabe *et al*. 1997). Chemical pollution is thus also a potential threat, particularly in the context of epizootics.

Black Sea harbour porpoises are also affected in some years by ice entrapment in the Azov Sea (see section “Habitat”).

## Conservation measures

The Black Sea population of harbour porpoises has been listed as Vulnerable in the IUCN Red List of Threatened Animals since 1996.

Commercial hunting of Black Sea cetaceans, including harbour porpoises, was banned in 1966 in the former USSR (present Georgia, Russia and Ukraine), Bulgaria and Romania, and in 1983 in Turkey. The riparian states assumed international obligations to protect Black Sea cetaceans as contracting parties of the Convention on Biological Diversity (CBD), Convention on the Conservation of Migratory Species of Wild Animals (CMS), Convention on the Conservation of European Wildlife and Natural Habitats (Berne Convention), Convention on the Protection of the Black Sea Against Pollution (Bucharest Convention), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, Appendix II), and the Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS). The harbour porpoise, *P. phocoena*, is mentioned in Annex II of the EC Directive No.92/43/EEC on the conservation of natural habitats of wild fauna and flora. In 1996, the Ministers of Environment of Black Sea countries adopted cetacean conservation and research measures within the framework of the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea (paragraph 62). The harbour porpoise is included as Data Deficient in the regional Black Sea Red Data Book (1999). However, in 2002 it was listed as Endangered in the Provisional List of Species of the Black Sea Importance, an annex to the Black Sea Biodiversity and Landscape Conservation Protocol of the Bucharest Convention.

On a national level, Black Sea cetaceans, including harbour porpoises, are protected by environmental

laws, governmental decrees and national Red Data Book listings. The harbour porpoise is listed in the Red Data Books of Bulgaria, Russia and Ukraine, which do not use the IUCN categories and criteria. In Russia and Ukraine, inscription in national Red Data Books means that the species should be monitored and managed by appropriate state/national programmes. Such a programme has existed in Ukraine since 1999 (the Delfin-programme adopted by the Ministry of Environment). Action plans for the conservation of Black Sea cetaceans were produced in Ukraine (2001) and Romania (2003) but they have no legal effect. In 2003-05 nine coastal protected areas were joined to form the Ukrainian National Network for Cetacean Conservation, an informal network consisting of 19 institutions (operational units) situated in 17 localities along the seaboard of Ukraine. Those protected areas are (from west to east): the Dunaisky [Danube] Biosphere Reserve, Chernomorsky (Black Sea) Biosphere Reserve, Swan Islands Branch of the Crimean Nature Reserve, Cape Martyan Nature Reserve, Karadag Nature Reserve, Opuk Nature Reserve, Kazantip Nature Reserve, Azov and Sivash National Park, and Meotida Landscape Park. The inventory of cetacean habitats has been completed and a common methodology for cetacean monitoring has been introduced in these protected areas. The ACCOBAMS Implementation Priorities for 2002-06 (Notarbartolo di Sciara 2002) envisage the development of a pilot conservation and management project in the well-defined area between Cape Sarych and Cape Khersones, southern Crimea (Ukraine).

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