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Status of the Common Dolphin, *Delphinus delphis*, in Canada*

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The Common Dolphin, *Delphinus delphis*, is widely distributed in continental shelf regions throughout the world, especially in warm-temperate and subtropical latitudes. It penetrates the tropical zone in areas where relatively cool waters keep surface temperatures between about 15 to 26°C. It also moves seasonally into higher latitude temperate regions when relatively warm summer waters allow it to extend its range polewards. It feeds on pelagic schooling prey such as various species of squid, smelt, herring, mackerel, mullet and lantern fish. Maximum body lengths can range up to 260 cm in males and 246 cm in females, but most adults are smaller than this. It attains sexual maturity at about five to seven years of age, has a gestation period of 10 to 11 months, a lactation period of up to 10 months, a calving interval which is probably about two years, and calves which are 75 to 90 cm in length at birth. The maximum life span is not known. It is relatively heavily exploited in the Yellowfin Tuna (*Thunnus albacares*) industry of the eastern tropical Pacific, and was extensively hunted in the Black Sea for many years. In the coastal waters of North America it appears to be quite abundant, and not subject to any particular threat; it may feed in zones where groundfish gill nets and drift nets are not usually set in any numbers at present. It can be abundant off the coast of Nova Scotia and Newfoundland for a month or two in summer; this is almost certainly the same population which is found from the Gulf of Maine to the Chesapeake Bay in the rest of the year. Apart from its seasonal occurrence on the Atlantic Shelf of Nova Scotia and Newfoundland and banks, it is probably best regarded as an occasional visitor to other Canadian waters. The coast of British Columbia in particular seems to be well north of its normal distribution on the west coast.

Le dauphin commun, *Delphinus delphis*, est très répandu dans les eaux des plate-formes continentales du monde entier, surtout dans les zones subtropicales et tempérées. Il se rencontre dans la zone tropicale là où les eaux relativement fraîches maintiennent la température à la surface entre 15° et 26°C. À l'été, il migre vers les régions tempérées sous des latitudes élevées où les eaux relativement chaudes lui permettent de prolonger son aire de répartition vers les pôles. Il se nourrit de proies concentrées en bancs pélagiques comme diverses espèces de calmar, d'éperlan, de hareng, de maquereau, de muge et de lanterne. Le mâle peut atteindre jusqu'à 260 cm de longueur et la femelle, 246 cm; toutefois, la plupart des adultes n'atteignent pas cette taille. L'adulte atteint la maturité sexuelle quand il a de cinq à sept ans. La gestation dure de dix à onze mois et la période de lactation, jusqu'à dix mois. La femelle met bas à presque tous les deux ans à un nouveau-né qui mesure de 75 à 90 cm de longueur. On ne connaît pas la durée de vie maximum. Le dauphin commun fait l'objet d'une exploitation relativement forte dans le cadre de la pêche de l'albacore à nageoires jaunes (*Thunnus albacares*) dans les eaux tropicales du Pacifique est; de plus, il a fait l'objet d'une chasse intense dans la mer Noire pendant de nombreuses années. Il semble assez abondant dans les eaux côtières de l'Amérique du Nord et n'est pas menacé de façon particulière. Il est possible qu'il se nourrisse dans des zones où des filets maillants et des filets dérivants à poisson de fond ne sont pas généralement mouillés en grand nombre à l'heure actuelle. Au large de la Nouvelle-Écosse et de Terre-Neuve, il peut-être abondant pendant un mois ou deux au cours de l'été; ce troupeau est tout probablement le même que celui présent dans les eaux s'étendant du golfe du Maine à la baie Chesapeake pendant le reste de l'année. À part sa présence saisonnière dans les eaux de la plate-forme continentale et des bancs au large de la Nouvelle-Écosse et de Terre-Neuve, le dauphin commun doit être considéré comme un visiteur occasionnel dans les autres secteurs canadiens. La côte de la Colombie-Britannique semble être en particulier bien au nord de son aire de répartition habituelle sur la côte ouest.

Key Words: Common Dolphin, Hourglass Dolphin, dauphin commun, *Delphinus delphis*, Cetacea, Delphinidae.

The Common Dolphin, *Delphinus delphis* Linnaeus 1758, is also variously known as the Saddleback or White-bellied Dolphin, especially on the Pacific coast, and sometimes as the Hourglass Dolphin. This animal (Figure 1) attains body lengths of up to 2.6 m and has a prominent dorsal fin. The body is typically dark purplish-brown dorsally, white ventrally, with shaded fields of grey and yellow forming an "hourglass" pattern along the flanks. After death the colour of the dorsal surface rapidly turns dark grey. The flippers are black, as is the area around the eye, and the dorsal surface of the beak or rostrum. There is a dark eye stripe in most adults.

The Common Dolphin is a slender, powerful swimmer, with a tall, broadly falcate dorsal fin. It is most easily recognized at sea by the extension of the pale vertical field up into the "cape" over the shoulders, with a resulting distinctive "criss-cross" in the

*Report accepted by COSEWIC 9 April 1991, no status designation required.

lateral pattern below the dorsal fin. Adults are usually from about 180 to 230 cm in length, although maximum lengths of 260 cm for males and 246 cm for females have been reported (Katona et al. 1983). Most animals occur in relatively small schools, with a modal value of about eight individuals (Winn 1982). Nevertheless, on occasion large aggregations are observed, sometimes including as many as 2000 animals (Winn 1982). Evans (1980) noted that it is frequently associated with flocks of Corey's Shearwaters (*Calonectis diomedia*) and Sooty Shearwaters (*Puffinus griseus*), Gannets (*Sula bassana*), Kittiwakes (*Rissa tridactyla*) and other medium and large gulls. It is rarely seen close to shore, but in certain seasons is abundant over the inner continental shelves of both coasts of North America. It has a global distribution in subtropical and warm temperate latitudes throughout both hemispheres. Distinct populations have been named, but at present it is best to regard these as local demes of a single species.

Although not commonly regarded as a resource animal, it was hunted for its meat until a few years ago by fishing communities of the Black Sea, especially the southern USSR and Turkey (IWC 1978); hunting probably still occurs in some coastal villages in the latter nation. It has ranked third, after Spinner Dolphins (*Stenella longirostris*) and Spotted Dolphins (*Stenella attenuata*), in mortality levels in the purse-seining fishery for Yellow-fin Tuna (*Thunnus albacares*) in the eastern tropical Pacific (IWC 1975). The species is said to be periodically or seasonally abundant off the coasts of Nova Scotia and Newfoundland (J. Lien, Memorial University, St. John's Newfoundland; personal communication), but there are few recent published data. Apart from this, it is normally considered as an unusual stray in other coastal waters of Canada (Anderson 1946), and appears to be directly or indirectly limited to seas where the surface temperatures average about 11 to 14°C. It does not seem to be under any general threat in North American waters.

Distribution

Western North Atlantic

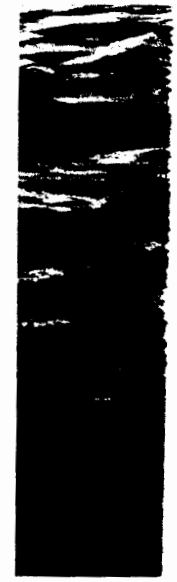
Delphinus delphis is a relatively common inhabitant of the continental slope region between Cape Hatteras and southern Nova Scotia (Katona et al. 1983), with a particular concentration between about 100-200 m depth contours (Winn 1982; Selzer and Payne 1988). In the fall it is particularly abundant along the northern edge of George's Bank (Winn 1982). The relative abundance of the species decreased towards 36°N in the Cetacean and Turtle Assessment program (CeTAP) surveys (Winn 1982). Sergeant et al. (1970) noted that it was apparently common off the Atlantic coast of Nova Scotia in the vicinity of the Emerald, Sambro and Middle Ground Banks between August and October. Mercer (1973) sighted two schools on the Sable Island Bank in August 1970. It ranges to the coastal waters of southeastern Newfoundland (Sergeant and Fisher 1957; Sergeant et al. 1970; Reeves and Mitchell 1987; Lien, personal communication). Sergeant (1958) did not regard this as a common event in the 1950s, remarking that a local whaling captain who had worked those waters for 10 years had not seen the species until the summer of 1957. In July 1957, however, Sergeant was able to examine a specimen shot in Dildo Arm, Trinity Bay (47°32′N), and in August he sighted and confirmed the identity of two schools; 30 to 40 animals on the east side of Flemish Cap at 47°N, 44°32′W, and eight to 10 at 42°50′N, 50°05′W. The former would still seem to be the confirmed northern limital record for the western North Atlantic. The more usual northerly limit in the fall seems to be about 43 to 44°N (Winn 1982; Selzer and Payne 1988).

South of Cape Hatteras the species seems to be less common, although schools have been reported as far south as the lower eastern coast of Florida (Essapian 1954; Caldwell and Golley 1965; Layne 1965). Leatherwood et al. (1976) reported that it occurred also in the Gulf of Mexico and on the coastal shelf of Venezuela. Most published data relate to strandings only.

Eastern North Atlantic

Collett (1877) remarked that he had "hardly any doubt that *Delphinus delphis* occurred ... probably right up to Finmark". For many years this was repeated as the limital range for the species in the coastal waters of Western Europe, based on an unconfirmed sighting near the Loføten Islands in April 1961, and the presence of a skull in the Tromsø Museum. Jonsgaard (1962) was the first to challenge this assumption. He was able to confirm that a specimen reported by Collett (1912), held in the Bergen Museum, had indeed been caught off Alesund (approximately 62°30′N) in 1881, but the skull in Tromsø was without data and could have come from anywhere, even outside Norway. Jonsgaard (1962) also reported that no *Delphinus delphis* were sighted during extensive shipboard surveys for cetaceans off northern Norway. Watson (1981) stated that it occurred as far north as Iceland, but while it may stray that far north (63°30′ to 66°30′N) with tongues of North Atlantic Drift water on occasion, no evidence of general distribution in this region was reported by Sigurjonsson and Gunlaugsson (1988). In the course of some of the most extensive surveys for cetaceans ever carried out in the waters of the North Atlantic they found the species only off continental shelves and banks of the United Kingdom and Ireland.

Evans (1980, 1987) noted that British surveys showed that the species was concentrated off the



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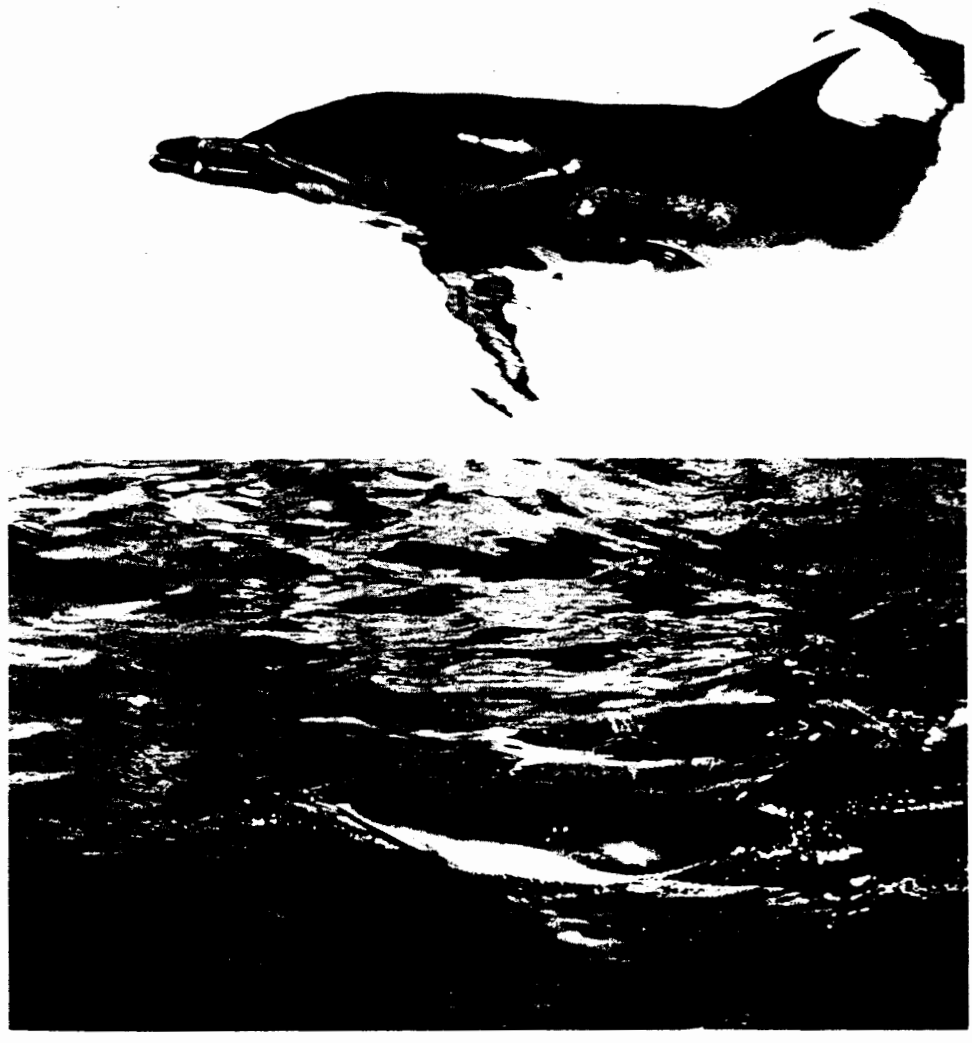

FIGURE 1. Female (A), and a pair (B) of Common Dolphins, *Delphinus delphis* (photographs by the author).

south and southwest coasts of Ireland, with seasonal penetration into the English Channel and off northeastern Scotland. In U.K. waters it is usually recorded between June and December, when warmer water is present in the English Channel and the Irish Sea (Evans 1980). The species is present off the coasts of Brittany in most months of the year (Duguy 1985). Duguy (1983) previously noted that it was rarely reported from the French coast of the English Channel (only 3.7% of 268 total strandings). Most of these were recorded from the Biscay coast in the winter and early spring. There were also few records the Mediterranean coast (7.1% of the total) and only four from Corsica. Cabrera (1914) and Casinos and Vericad (1976) reported it to be common off the coast of Spain and Sequeira (1990) indicated that it was the commonest cetacean off the coast of Portugal. Van Bree and Purves (1972) noted that it occurred off the coast of northwest Africa, as well as Europe. Viale-Pichod (1977) and Gihr and Pilleri (1969) provided data from the Mediterranean; the latter arguing that this population was distinctive morphometrically.

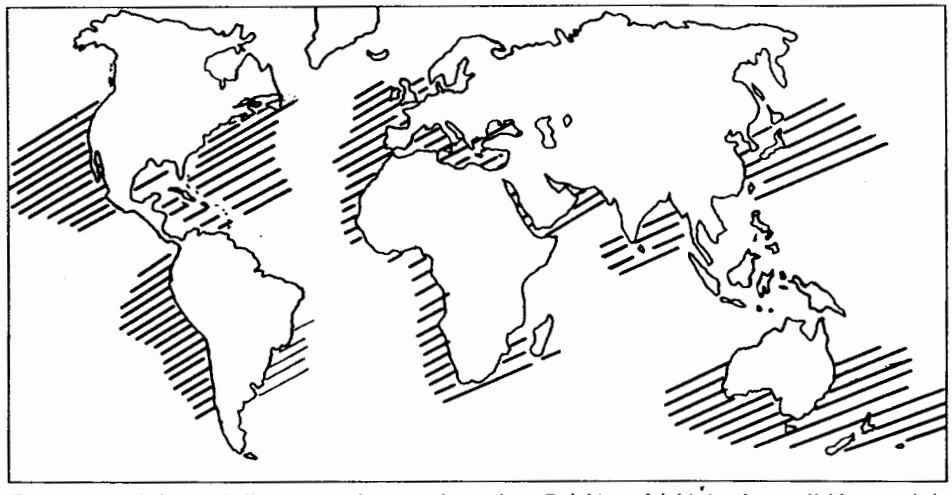

FIGURE 2. Shaded areas indicate approximate regions where *Delphinus delphis* has been reliably recorded. Strays will occur outside these areas, especially in warmer waters, and there may be other areas of concentration. Much material from the tropics has been inaccurately identified in the older literature and the records are unreliable.

Tomilin (1967) likewise considered *Delphinus delphis* of the Black Sea to be a unit population.

Eastern North Pacific

Watson (1981) and Gaskin (1985) illustrated the whole of the tropical and subtropical Pacific as inhabited by this species, but it is unlikely that the species is resident throughout this region, although schools may transit through virtually any area at some time or other. Probably the majority of all populations is concentrated along the coastal shelves, perhaps seasonally spilling out along convergence zones, if abundant prey are present. The truly pelagic ocean regions are more the domain of the spotted and spinner dolphins of the genus *Stenella*, rather than *Delphinus*.

The northern limital record on the west coast of North America is a stranding at Victoria, British Columbia (Leatherwood et al. 1982), but these authors pointed out that few sightings are made north of Point Conception, California. Scheffer and Slip (1948) included it in their list of cetaceans of Washington State on the basis of a photograph and a specimen of dubious identity recorded from Pacific Beach. Evans (1976) summarized data from tuna boat observers and research cruises and showed that the confirmed regular range covered a broad belt up to 600 nautical miles offshore from about 36°N to about 5°S in the vicinity of the Galapagos Islands. Evans recognized a clear break in distribution of *Delphinus delphis* extending for several hundred miles along the coast of Mexico in the vicinity of Acapulco, providing more evidence for north-south population segregation, possibly as a result of a westward salient of very warm (28°C +) oceanic surface waters touching the coast in this region (Evans 1976: Figures 4, 7). Given the range of apparent temperature preference of this species, it is likely to be restricted westwards by the cool waters of the south-flowing California Current and relatively low temperatures on the eastern edge of the North Pacific Drift in the northern part of its range, and by the distribution of the north-flowing cool waters of the Peru Current on the west coast of South America. Nevertheless, Bruyns (1971) and Aguayo (1975) have recorded it to 40°S on this coast. Some are taken incidentally in fishing gears on the coast of central Peru (Read et al. 1988).

The eastern North Pacific is the only region adjacent to North America where we have any data to support population segregation at present. Banks and Brownell (1969) concluded that two separate populations, long-snouted and short-snouted, were present in the coastal region of California, and applied the specific name *bairdii* to the former. Van Bree and Pilleri (1972) argued that long-snouted forms occurred in other parts of the world and unless all of them could be shown to belong to the same species, *bairdii* was not a suitable name. They noted that the name *Delphinus capensis* (Gray 1828), was taxonomically available and might be an applicable name for a discrete North Pacific population.

The single long-snouted population occurs only inside the 100 fathom line off southern California and in the Gulf of California, but Evans (1976) recognized a short-snouted form in the offshore regions of the eastern tropical Pacific, and two other short-snouted forms off southern California and in the

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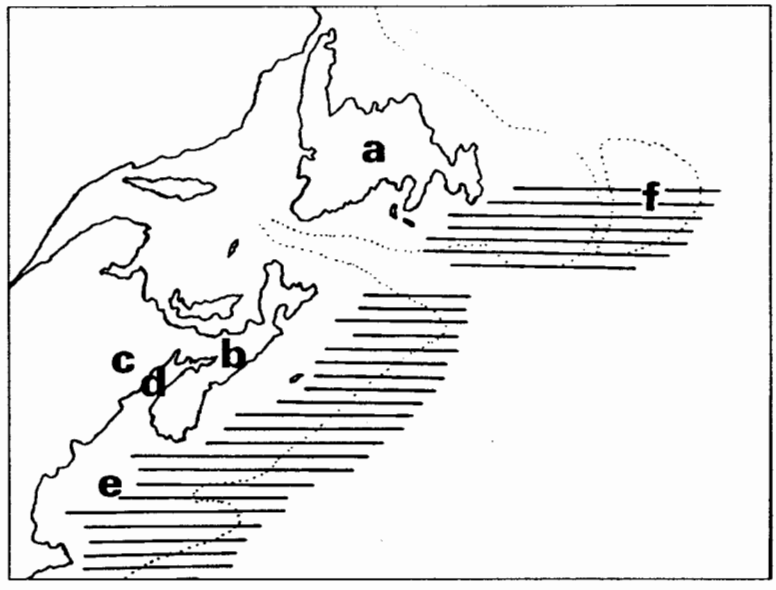

FIGURE 3. Shaded area indicates the regular, or seasonal, zones of occurrence of *Delphinus delphis* off eastern Canada. Strays will occur outside this area, and the range may extend further offshore than shown. a — Newfoundland, b — Nova Scotia, c — New Brunswick, d — Bay of Fundy, e — Gulf of Maine, f — Flemish Cap. [No range map for the west coast is shown as the species is only a rare stray north of Oregon].

Baja region respectively. Long and short-snouted herds sometimes overlapped, but there did not seem to be mixing. Evans (1976) speculated that statistically significant differences in the width of the right premaxilla and the greatest width of the external nares might be related to different vocalization capabilities along latitudinal clines as a result of adaptation to different prey species.

Protection

Small cetaceans were not protected under the original terms of the International Whaling Convention of 1946. In Canada, the Cetacean Protection Regulations of 1982, which were promulgated under the Fisheries Act, prohibit the catching or harassment of all species, including delphinids such as the Common Dolphin. Scientific sampling may be permitted under specific licences after thorough review of the application by the Department of Fisheries and Oceans.

Population Sizes and Trends

Western North Atlantic

Winn (1982) used sighting data from the CeTAP surveys of 1978 to 1982 to make some estimates of population sizes in the western North Atlantic. Although the survey did not include the Atlantic coast of Nova Scotia, this may introduce only a rather small additional error as winter surface temperatures on the shelf drop to 4 to 6°C. Under these circumstances, if the population stays on the shelf, all should be within the CeTap survey even in winter. The possibility remains that this segment may be more pelagic and move south. In that case, the size of the entire population may be considerably higher than the value derived by Winn (1982). The winter peak average was calculated at 31 124 ± 36 151. The maximum point abundance was estimated as 34 285 ± 71 487, in January 1981. While the confidence limits are very wide the averages are at least of the same order of magnitude. Nishiwaki (1972) gave a provisional estimate of the North Atlantic population at 30 000+, but this was based on very limited data.

Eastern North Atlantic

There are no available estimates of population size for the eastern North Atlantic.

Eastern North Pacific

Because of statistical problems with the survey data and the large variance in school size (5 to 3000), Evans (1976) declined to calculate a population estimate for the Californian-Central American shelf region. Later, the Scientific Committee of the International Whaling Commission (IWC 1978) used data provided by observers on tuna boats to estimate the approximate population size of *Delphinus del-*

phis in the eastern tropical Pacific (ETP) as 1 430 000 animals.

Habitat

Physical Characteristics

Delphinus delphis is essentially a denizen of the continental shelf and bank regions of the world (Gaskin 1968; Evans 1976; Winn 1982; Selzer and Payne 1988). Gaskin (1968) concluded that off New Zealand its range was bounded by the northern edge of the Subtropical convergence and a minimum water temperature of 14°C. Selzer and Payne (1988) found the species between 5° to 22.5°C, with a mean surface temperature of 11 ± 3.67°C. Winn (1982), summarizing the results from the CeTAP surveys of 1978 to 1982, gave the temperature range for sightings of this species as 1.0 to 24.0°C, with 90% between 7.0 to 22.4°C, an overall average of 13.7°C, and mode of 9°C. Given the dearth of cold water sightings in the rest of the surveyed areas of the North Atlantic it is natural to query the apparent records of this species in waters with temperatures as low as 1° to 5°C. If such temperatures result from relatively localized winter upwellings or coastal melt plumes, there is no reason why a dolphin of this size could not tolerate these temperatures for some days as long as it could continue feeding, since some animals certainly remain well north of 40°N during winter, at least until about February (Winn 1982). Schools may venture close to shore at any time of the year but are more often found between the 100 to 1000 m depth contours (Selzer and Payne 1988). Winn (1982) reported that the depth range over which all sightings were made was 26 to 5121 m, the average 844 m and the mode 91 m. Selzer and Payne (1988) found that 66% of all contacts were over zones with steepest subsurface topographic relief. All contacts occurred within a surface salinity range of 32 to 35‰.

Diet and Feeding

Western North Atlantic: Surface feeding by *Delphinus delphis* has not been observed frequently in any area. Winn (1982) observed feeding in only 2.4% of total sightings (n = 453) during the CeTAP surveys off the eastern seaboard of the United States, and then only in the vicinity of the Great South Channel along the edges of George's Bank. There is little information on stomach contents from animals taken or stranded in this region. Selzer and Payne (1988) noted that peak abundance of *Delphinus delphis* in the southern Gulf of Maine and over George's Bank appeared to coincide, at different times of year, with peak abundances of Mackerel, *Scomber scombrus*, Butterfish, *Poronotus triacanthus*, and Common Squid, *Ilex illecebrosus*. Sergeant (1958) found about 20 beaks of the latter animal in the stomach of a single specimen taken in southwestern Newfoundland.

Eastern North Atlantic: Evans (1982) noted that stranded or netted specimens examined on the British coasts had generally been feeding on herring, mackerel and cephalopods. A large number of stranded specimens were examined during the late 1970s and 1980s from the coasts of France by Collet (1981) and Desportes (1985), The dominant items of diet differ, depending if the calculation is based on numbers or weight. Nevertheless, the diet is varied. Among the most frequent prey species are Herring (*Clupea harengus*), Mackerel (*Scomber scombrus*), Horse Mackerel (*Trachurus trachurus*), Blue Whiting (*Micromeristius poutassou*), Whiting (*Merluccius* spp), Pilchard (*Sardina pilchardus*) and Anchovy (*Engraulis encrasicolus*). Cephalopods are also commonly taken, including *Loligo*, *Alloteuthis* sp., *Sepiola* sp. and sometimes *Sepia* sp.

Eastern North Pacific: Evans (1976) reported that the diet off southern California changed from mainly lantern fish and smelt in the spring and summer, to anchovies and squid in the winter months. *Loligo opalescens* made up about 99% of the total winter cephalopods eaten. Similarly, among the fish taken in winter, *Engraulis mordax* comprised 92% of the total, the balance being made up of *Merluccius productus* (6%) and *Cololabis saira* (25%). While the spring and summer diet was more varied, *Leuroglossus stilbius* accounted for 56% of the total, and *Seriphus politus* 19%. Of the relatively small quantities of cephalopods (23%) taken at this time of year onychoteuthids made up 85% of the total, and *Loligo opalescens* the remaining 15%. The remainder of the food consisted of 70% fish and 7% miscellaneous crustaceans.

Habitat Protection

There is little that can be done to protect this species in its broad range of distribution, other than to prohibit direct hunting, and to ensure that it is not at risk from surface drift nets, such as those set for squid in the Pacific.

Degree of Specialization and Consequent Vulnerability

In areas such as the Atlantic coast of France, the diet seems varied enough (Desportes 1985) for it to be able to withstand periodic over-fishing of some of its prey species. The apparent reliance on a much narrower spectrum of prey in the Californian coastal regions (Evans 1976) might indicate more vulnerability to the impact of local over-fishing of anchovies, although the alternative prey, lantern fishes, is likely to remain a seasonally abundant alternative.

Biology

Reproductive Biology

The male Common Dolphin attains sexual maturity at body lengths of about 170 cm in the Black Sea

(Kleinenberg 1956) and 190 to 200 cm in the waters of the northeast Atlantic off the coast of France (Collet 1981). Uncertainty remains about the age at which this occurs because of problems of interpretation of laminae in the dentine and cementum, although Collet (1981) believed it to be at 6+ years in the male, and 5 to 7 years in the female. The estimate of three years for sexual maturity in both sexes, published by Sleptsov (1940), was not based on a definitive method of age determination and can be discounted as too low.

The gestation period is generally agreed to be 10 to 11 months, but there is disagreement among workers concerning the length of the period of lactation, varying from 5 to 6 months (Leatherwood et al. 1982), to at least 10 months (Collet 1981). The mean calving interval has been estimated as 1.3 years (Sleptsov 1940) or two years (Collet 1981). Estimates of body length at birth range from 75 to 80 cm (Mitchell 1975) to 90 cm (Collet 1981). The latter suggested that the peak period for breeding in the eastern North Atlantic population was during May and June. Winn (1982) reported relatively few sightings of calves in the southern Gulf of Maine and over the central seaboard shelf region in any season (60 sightings in three years): when seen, calves tended to occur in the larger schools (20+ animals). Sergeant et al. (1970) reported that a female taken in August 1954 off Nova Scotia was lactating and accompanied by a calf. Mercer (1973), recorded another lactating specimen taken off North Carolina in April 1967. Calves in the Black Sea were usually seen in the summer months (Sleptsov 1940) and in the spring-summer months off the coast of southern California (Leatherwood et al. 1976).

Movements

Northwest Atlantic: Winn (1982) noted that annual movements of *Delphinus delphis* in the coastal regions of eastern North America were still poorly known. During the CeTAP surveys referred to earlier, abundance was lowest in the summer. The most likely explanation , since numbers did not rise elsewhere in United States waters, is that a significant segment of the population follows the edge of the North Atlantic Drift as the summer progresses, and in July-September is distributed along the Atlantic coastal shelf of Nova Scotia and Newfoundland, beyond the northern limit of the CeTAP transects.

Northeast Atlantic: Evans (1980) summarized what little is known of the movements around northwestern Europe. There appears to be a movement into the southwest coastal regions of Ireland and southern England in the summer, associated with movements of mackerel populations. A parallel movement of Common Dolphins past the north of Scotland into the northern North Sea in August coincides with the migration of spawning herring.

Northeast Pacific: Evans (1976) noted that although *Delphinus delphis* was present in the coastal waters of southern California all the year round, clear peaks could be recognized in January, June and September-October. Because at least two or three distinct sub-populations have been recognized in the region, the biological significance of such peaks must be interpreted with caution. Common Dolphins have also been observed to follow major features of bottom topography such as escarpments, and make regular return movements (as recorded by radio-telemetery, Martin et al. 1971) over periods of days or weeks.

Behavioural Adaptability

The Common Dolphin has been kept in seaquaria [eg. in New Zealand (Gaskin 1972)], but the results have not generally been very successful. High mortalities have been recorded. While the diet varies greatly from one part of the world to another, the larger concentrations of this species tend to depend on a relatively small number of prey species in most areas. In the eastern tropical Pacific the species suffers significant mortalities in purse seining operations for tuna, and in coastal and shelf waters is vulnerable to set and drift net fisheries. It does not seem to be able to learn to avoid these gears very readily, possibly because it only uses echolocation when hunting food in relatively deep waters where natural obstructions would not usually be anticipated. A high proportion may be entangled at night, when the netting is almost invisible. It is not a species that one might expect to show great ability to adapt to major changes in its habitat. It seems to be closely tied to specific, abundant schooling fish and squid of about 10 to 30 cm in length, and may actually be attracted to nets where such fish are entangled. Nevertheless, its distribution is so extensive that it is unlikely to be threatened on a global scale in the foreseeable future other than through the impact of net entanglements, and over a longer time period, intensive competition with man for its prey species.

Limiting Factors

Delphinus delphis is essentially a coastal shelf species or an inhabitant of relatively warm ocean frontal zones, and strays only occasionally into shallow inshore waters. Globally its range is vast, although there may be recognizable sub-populations which have relatively low rates of genetic interchange.

The Common Dolphin used to be seasonally common on the coasts of Belgium until the mid-1950s (De Smet 1974; Van Bree 1976), since which time it has declined rapidly in apparent abundance. Evans (1980) speculated that this might be the result of changes in regional oceanography, or the result of excessive incidental captures in fishing gear such as gill nets.

Evans (1976) observed that while this species ranked third in tuna purse-seine mortalities after *Stenella longirostris* and *Stenella attenuata*, the 1973 incidental kill was of the order of 21 000 animals, based on an estimate from the 14.8% of the total purse-seine sets in which *Delphinus delphis* was captured.

As long as the Common Dolphin is not threatened by specific fishing gear such as purse-seines and surface drift nets, it seems unaffected by shipping. It is undeterred by cargo ships, fishing vessels, or pleasure craft, and frequently comes to ride the bow wave.

Special Significance of the Species

Unlike the Harbour Porpoise (*Phocoena phocoena*) and the White-sided and White-beaked dolphins, *Lagenorhynchus acutus* and *Lagenorhynchus albirostris*, the Common Dolphin has a world-wide distribution. While it is usually found in coastal shelf waters, it may also be encountered hundreds of miles from land in the tropics and subtropics. To lovers of all marine life it has special symbolic status, being the dolphin of the coinage, pottery and friezes of Ancient Greece, Rome and other early Mediterranean powers.

Evaluation

The only significant penetration of Canadian waters by this species seems to occur on the Scotia Shelf and on the continental shelf off Newfoundland during summer and fall months when water temperatures exceed 11°C (Sergeant et al. 1970; Reeves and Mitchell 1987). Although it has suffered significant mortality in the tuna purse-seining industry of the eastern Tropical Pacific, there are few data on similar fishing gear mortality in the warmer waters of the Atlantic. There is currently no evidence of a major threat to this species in Canadian waters, and no requirement for any classification by COSEWIC at this time.

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