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Supplement
to the
**Atlas of the Marine fauna
of Southern Spitsbergen**

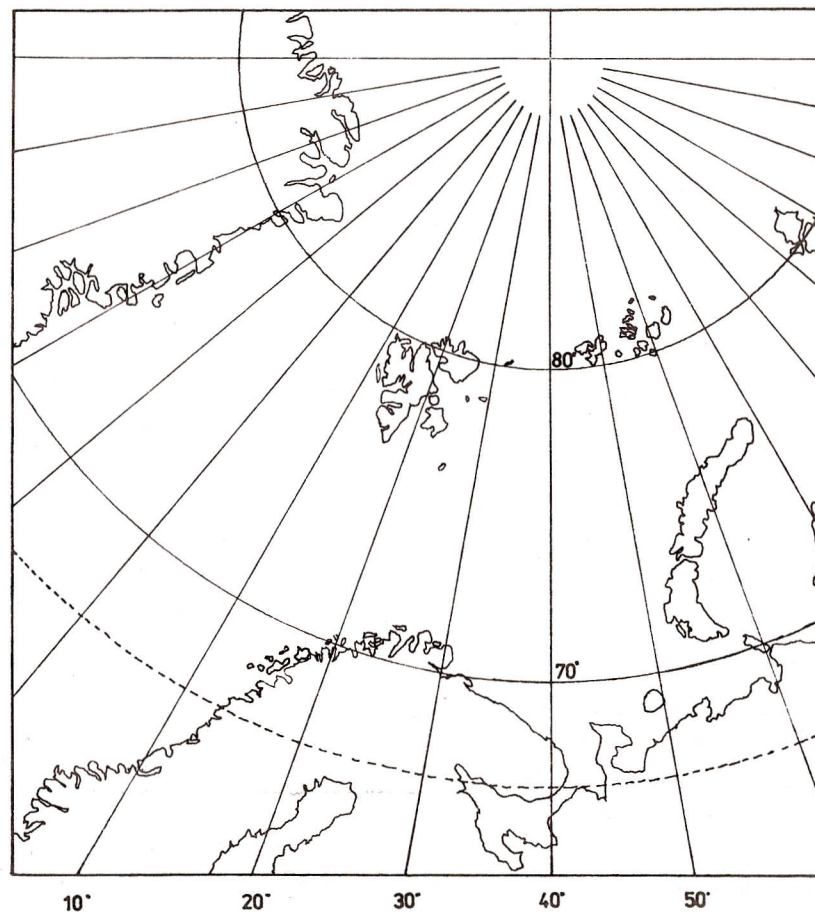
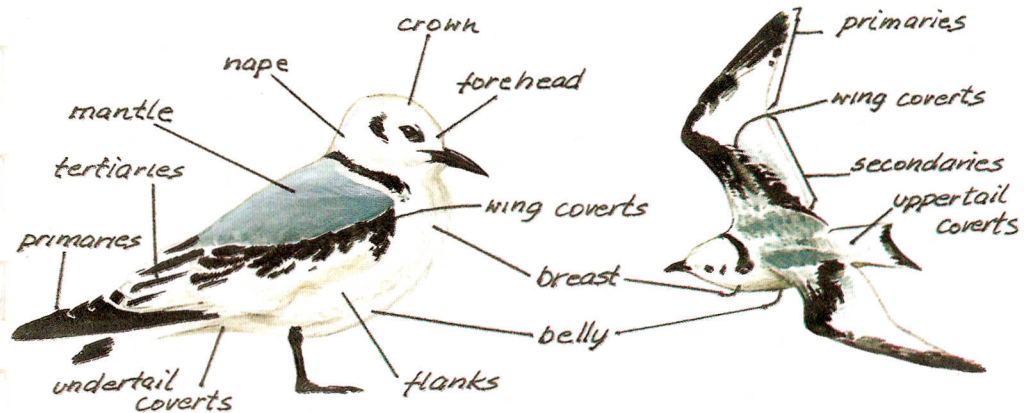
Field guide to seabirds and sea mammals
of Spitsbergen and Barents Sea

by Michał Skakuj (illustrations)
and Jan Marcin Węśławski



ARCTIC ECOLOGY GROUP

This brochure is an supplement to the "Atlas of South Spitsbergen Marine Fauna" edited by Romuald Z. Klekowski and Jan Marcin Węśławski, presenting in four volumes more than 500 marine species inhabiting South Spitsbergen National Park. Presented work is ment for the field use from boats, ships and yachts entering the Svalbard archipelago area and Barents Sea. The recent opening of Russian Arctic is the opportunity to carry out research on areas unaccessible till that time. Environmental problems like overfishing and contamination makes the international cooperation in wildlife studies on Barents Sea very important. Secretariat of the Coordinative Committee on European Arctic Ecological Research collects all data concerning seabirds and sea mammals occurrence in the Barents Sea. All persons willing to contribute their observations are requested to contact : Arctic Ecology Group, Institute of Oceanology, Polish Academy of Sciences, Sopot 81 - 967, street Powstańców Warszawy 55, Poland.



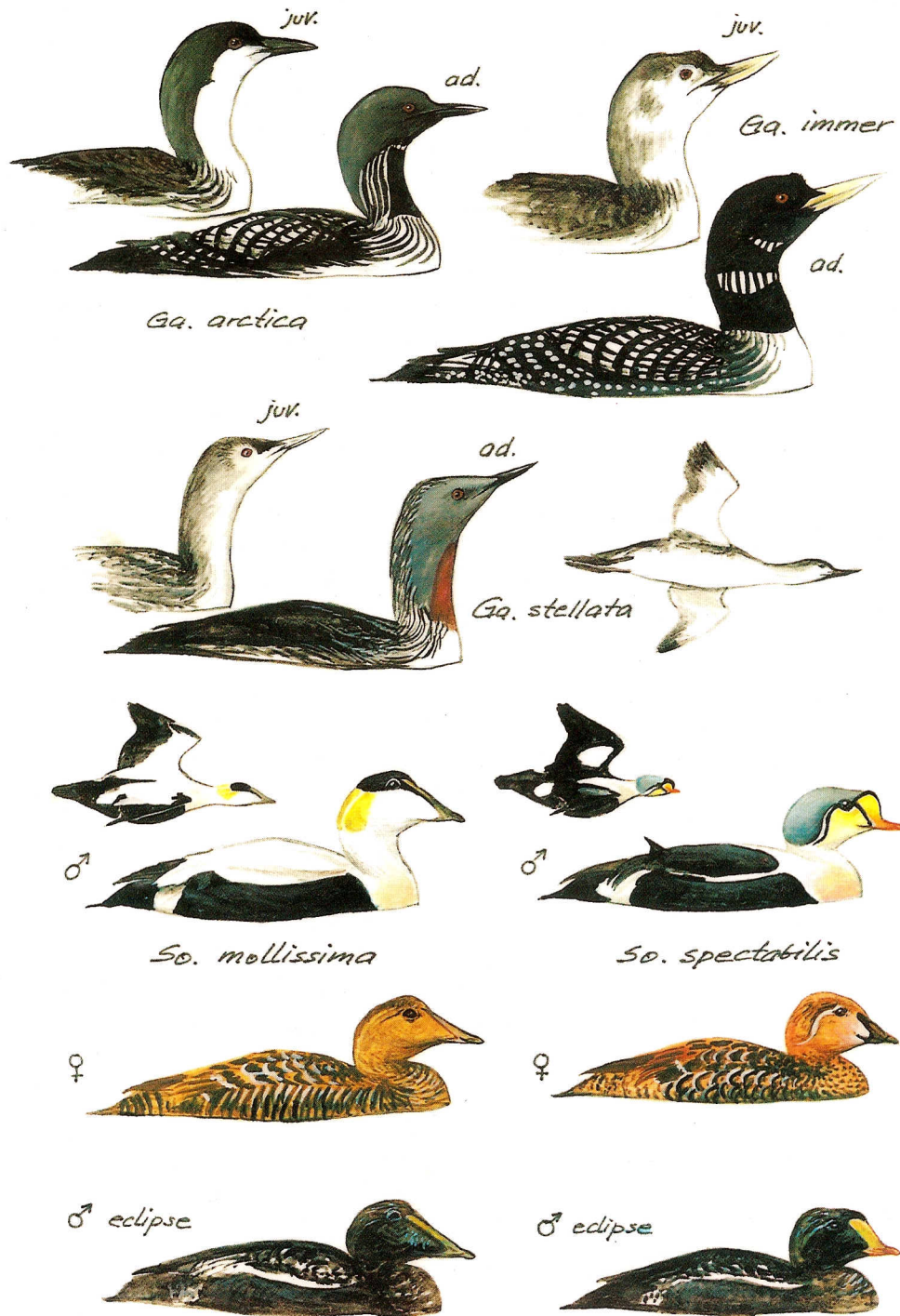
Gavia arctica — Black - throated diver — larger than Red - throated with stouter bill and head holding more horizontal. In breeding plumage white patches on back, ashy - grey head and black throat are diagnostic. In juveniles the border between grey and white on neck is sharp and clear. In fly wingbits are shallow and fast.

Gavia immer — White - billed diver — much bigger than two other species, distinctly thick neck and high, heavy bill. Head is holding up, but forehead is steep. Bill is white to yellowish with distinct arched lower mandibule. In juvenile eye are on light background, and there is a lot of white colour on the neck.

Gavia stellata — Red - throated diver — slightly smaller than Black - throated diver, with up holding, more triangular head and slimmer bill. There are no white patches on back in breeding plumage. The red throat from far distance is recognised as dark patch. Juvenile is much lighter than adult. The border between dark and white on neck is not clear. Eye are usually on light foreground (dark in Black - throated). In fly wingbits are slow and deep when compared to Black - throated.

Somateria mollissima — Common eider — heavy and stout duck, with triangle head profile. Eclipse male more similar to female but distinctly darker with white upperwing coverts. Female brownish with dark barring on breast, flanks and uppertail coverts. Bill in both sexes horny - greenish with some yellowish tinge at base in males.

Somateria spectabilis — King eider — slightly smaller than Common eider, more square, flatter head profile. Eclipse male as blackish as Common, but the head profile and orange - yellowish bill are distinctive. Female very similar to Common eider but general coloration more orange - cinnamon with lighter sides of the head. Square, more flat head profile with small knob at the base of the dark bill, and a smile are characteristic.



Phalacrocorax carbo — Cormorant — larger than eiders with characteristic long, hooked bill. Juvenile is brownish with variable light breast and belly. There is a flesh skin before and around eyes. In fly long tail and “broken” neck are characteristic.

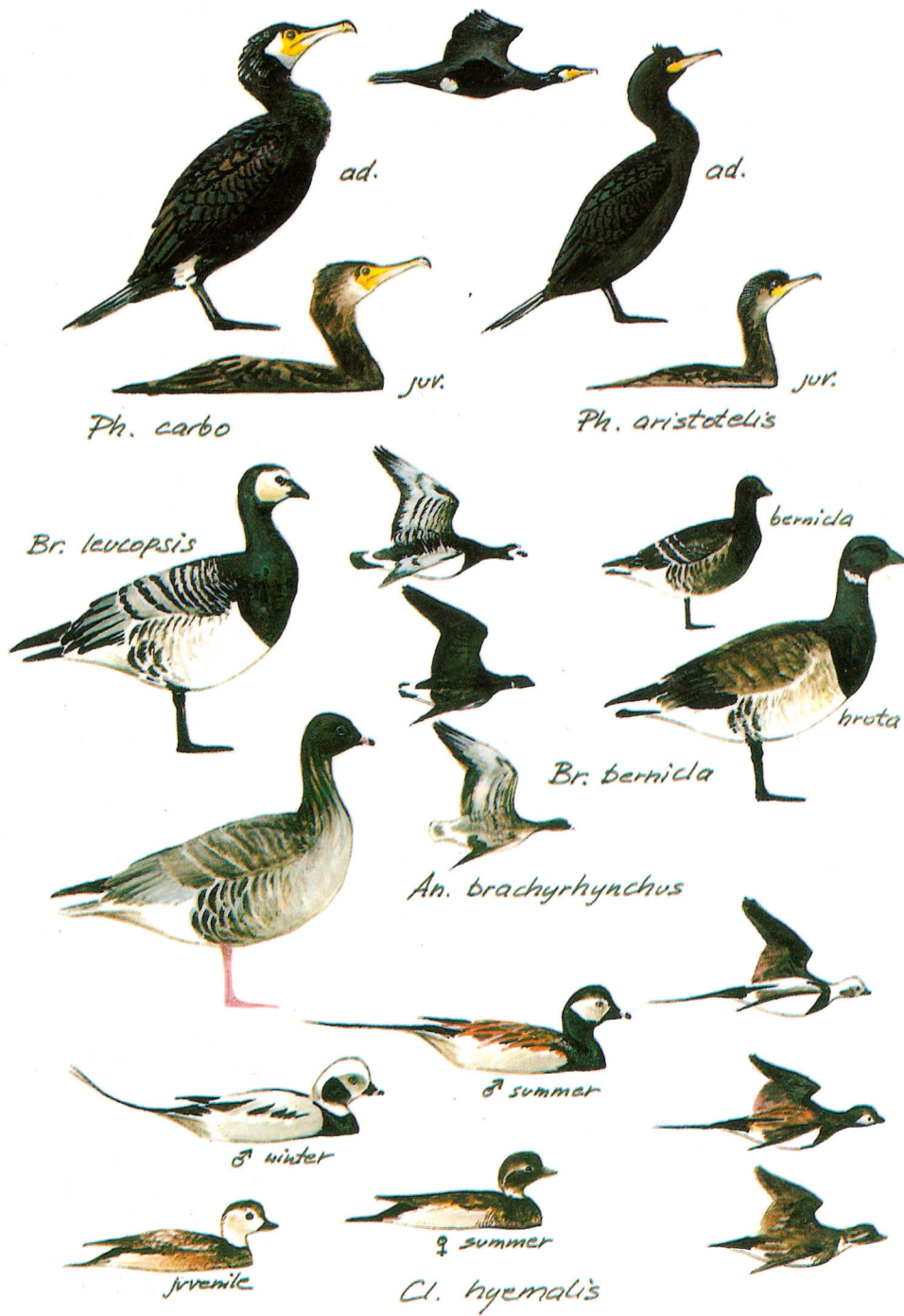
Phalacrocorax aristotelis — Shag — smaller and slimmer than Cormorant. Eye surrounding dark, just gape yellowish. Juvenile browner and lighter. Dark before eyes, with smaller and slender gape than Cormorant. Upperwing coverts lighter than in juvenile Cormorant. In fly looks slender and has more rounded wingtips than Cormorant.

Branta leucopsis — Barnacle goose — distinctly silvery with black barring on upperparts, bill short and black. In fly black breast and neck with white sides of the head are diagnostic from far distance.

Branta bernicla — Brent goose — slightly smaller than Barnacle and much darker. Adult differs from juveniles by white patch on neck, and no white on wing coverts. In fly looks very dark with long and narrow wings.

Anser brachyrhynchus — Pink-footed goose — slightly larger than Barnacle with small head and short bill. There are some silver-grey tinge on scapulars and wing coverts. The greyish tail with wide, white surrounding is the best distinguishing feature. Legs and patch on bill pink.

Clangula hyemalis — Long tailed duck — there is no similar species in the area, but transitional plumages of males could be similar to Puffin from far distance. In fly it is small duck with all dark wings and white belly with dark breast band.

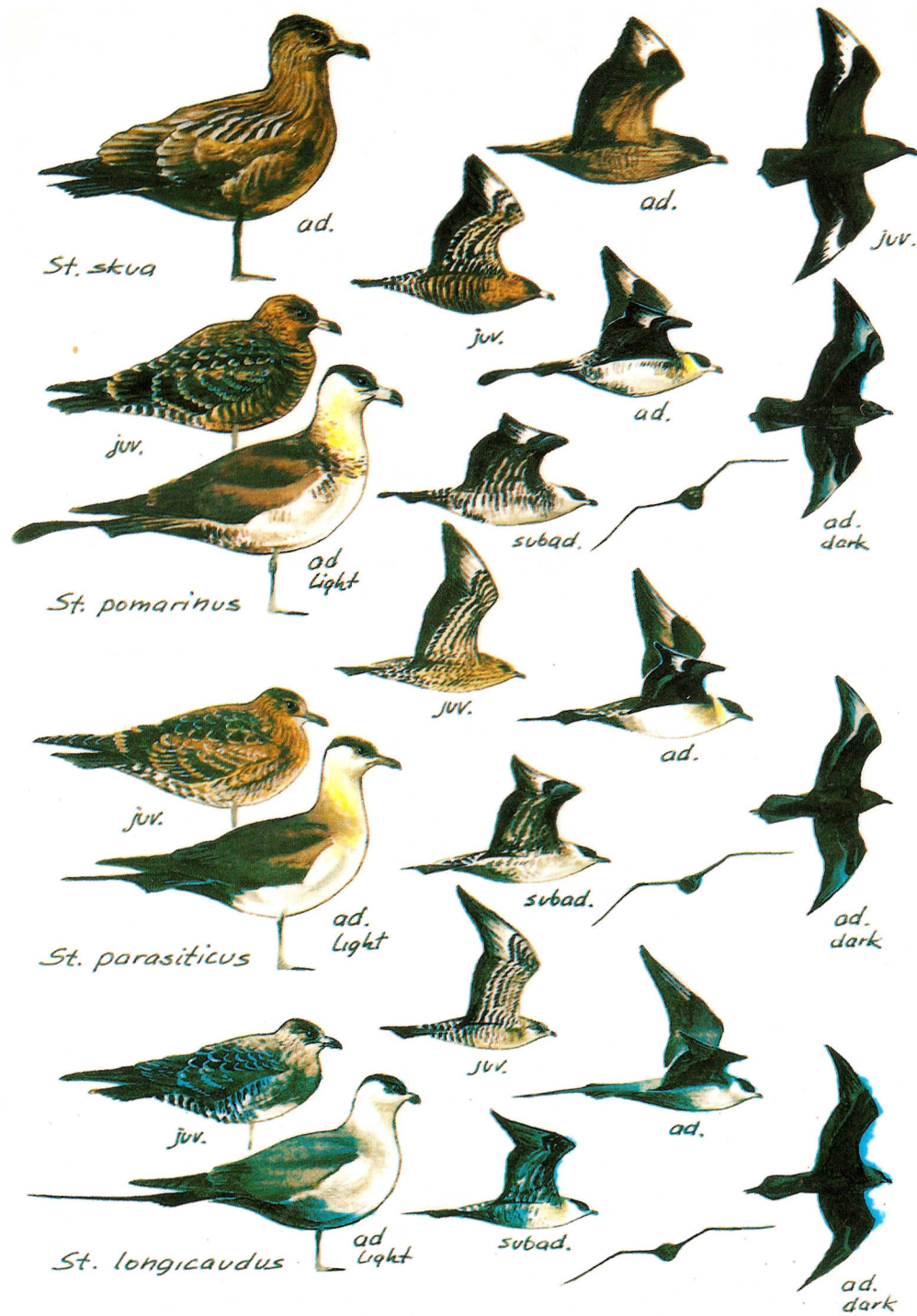


Stercorarius skua — Grac skua — the greatest skua, with broad, pointed wings. Large head and short tail. In fly white patches on upper and underwing are more conspicuous than in other skuas.

Stercorarius pomarinus — Pomarine skua — compared to Arctic skua is more heavy with broader wings, shorter tail and thicker bicoloured bill. In all plumages has rounded central tail feathers. In juveniles there is second light crescent on underwing coverts of primaries (one in Arctic and Long - tailed skuas). Also juvenile has distinctly barring on tail coverts. Subadults are very similar to adults but have some barring on underwing, tail coverts and flanks.

Stercorarius parasiticus — Arctic skua — bigger than Kittiwake, compared to Pomarine has lighter silhouette with shorter and longer hand. Central tail feathers are always pointed. Juveniles has no distinctly barring on tail coverts. Bill is slender and darker than in Pomarine. Adults in two color forms as in Pomarine and Long - tailed.

Stercorarius longicaudatus — Long - tailed skua — the smallest from skuas, compared to Arctic has slender wings with long arms, longer tail and shorter bill. Juvenile are more cold in colours with distinctly barring as Pomarine. In adults no white patches on underwings, just two white shafts of outer primaries on upperwings. Also adults are greyish above and have more black on undertail and belly.



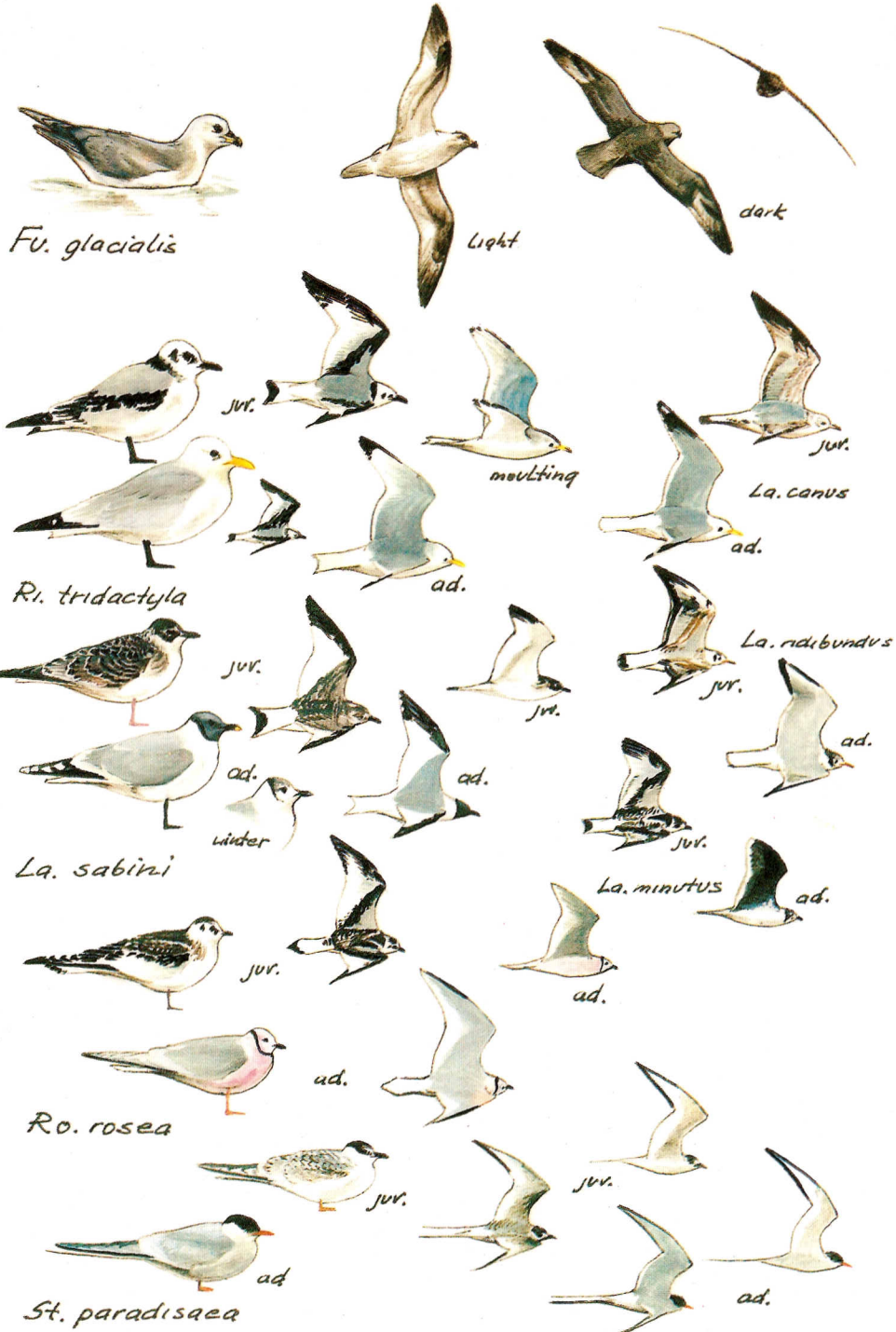
Fulmarus glacialis — Northern fulmar — in size of Kittiwake but heavier, with bigger head and short stout bill. Silhouette with downward, stiff wings. Wingbits shallow and fast. In fly light window on inner primaries. There are two forms — dark and light and a lot of intermediates.

Rissa tridactyla — Kittiwake — in size of Northern fulmar. Short black legs. Adult with lighter outer primaries ended with black triangle. Head and body white, bill yellow. Juvenile with distinct W shape pattern on upperwing, tail with black band. There is a big variety of plumage among moulting adults and immatures. Some moulting are similar to Common gull (*Larus canus*).

Larus sabini — Sabin's gull — smaller than Kittiwake with slightly forked tail. Adult dull grey on upperwing and mantle except black outer primaries and their coverts. Pure white inner primaries as well as secondaries. In breeding plumage head is blackish-grey. Bill dark with yellowish tip. Legs blackish. Juvenile similar to adults but dark brownish on upperparts with whitish scaloping. Nape and most of the head is also dark brownish. Tail with black band, legs dark pinkish.

Rodostetia rosea — Ross's gull — slightly smaller and slimmer than Sabin's gull with slender wings, triangular tail. Adult with dark grey upperparts except black outerweb of outer primaries and white, broad trailing edge to the inner primaries and secondaries. Underwing coverts dark grey. Juveniles with distinct black W shaped pattern on upperwing with black ends of almost all primaries. Inner primaries, secondaries and some coverts pure white. Bill is short and black, legs fleshy. In some plumages similar to Little gull (*Larus minutus*).

Sterna paradisaea — Arctic tern — small and very gentle bird with deep forked tail and very short legs. Adults with upper parts bluish grey and darker tip of outer primaries, black line on outer web of outer primaries. Underwing with distinctly translucent primaries and secondaries. Juvenile with some brownish tones on upperparts, especially on mantle and scapulars, dark patches on forewings. Black cap not complete, bill black with some red at the base. In fly very long, slim wings and long tail.

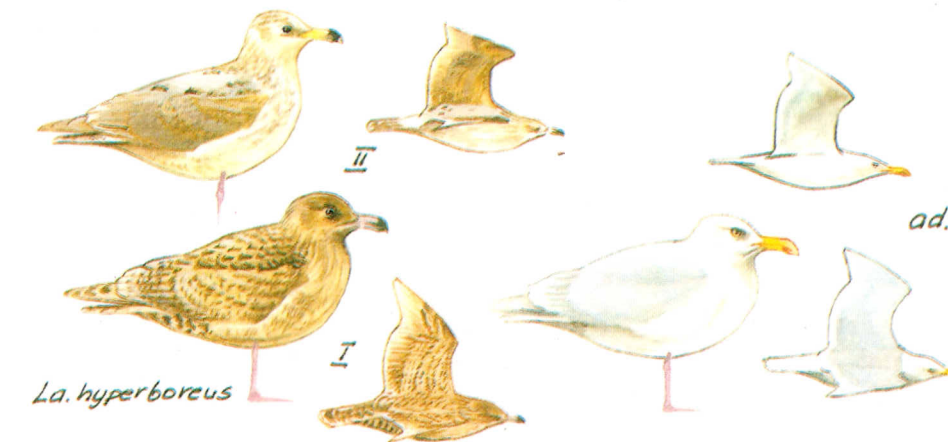
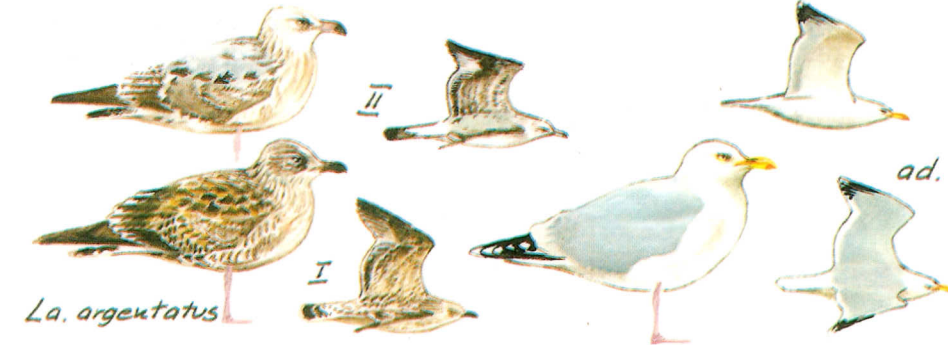
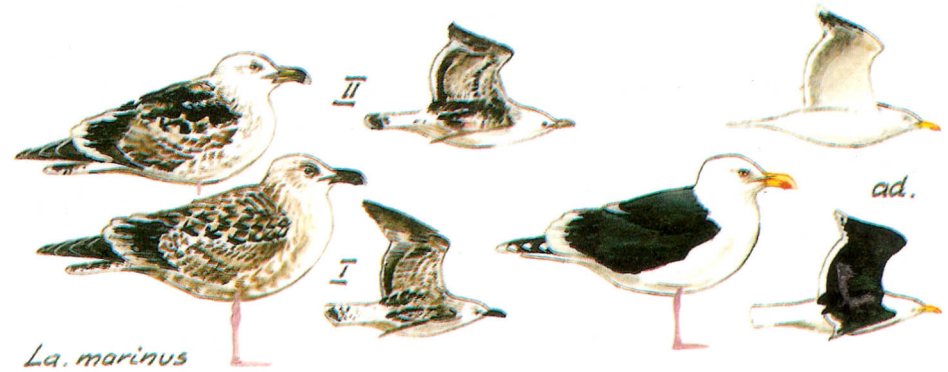


Larus marinus — Great black - backed gull — very big and heavy gull. Head flat with stout bill. Juvenile of the year with whitish head and all black huge bill. Light window on inner primaries. Second year immature with ashy - black feathers on mantle. Underparts and head are distinctly whitish, bill brownish at the base. In fly there is distinct white trailing edge to the secondaries and more contrast between black tail band, mantle and white upper-tail. Immature in third year is more similar to adults but not so clear coloured with the shade of tail band. Fleshy coloured legs.

Larus argentatus — Herring gull — slightly smaller than Great black backed gull with more gently silhouette. Juvenile of the year similar to that of Great black backed but more uniformly dark, warmer in shades with two tones bill. Second year immature with more conspicuous window on inner primaries and number of grey feathers on mantle. Tailband is much wider and contrast well with whitish uppertail, bill lighter. Third year immature similar to adult but with some brownish tones on upperwing coverts and shade on tail band, fleshy coloured legs.

Larus hyperboreus — Glaucous gull — slightly larger than Great black - backed gull. Flat head, very big, stout bill. In fly wings look broad in arm and short in hand part. Distinct heavy belly and short tail part. Juvenile of the year with brownish appearance, lighter primaries and distinctly bicoloured bill. Second year immature light grey with wings coverts darker, head and belly distinctly whitish, bill with yellow tones at the base. Third year immature similar to adult, with brownish tinge on wing coverts. Adult very light, no black colour on wing tips in every plumages. Fleshy coloured legs.

Pagophila eburnea — Ivory gull — distinctly smaller than Glaucous gull with very round head, small bill and short black legs. Adult all white, bill blue -grey with yellowish tip. In fly body very rounded, wings broad and pointed. Juvenile white with blackish area around eye and base of the bill. Black spots mainly on primaries, secondaries and their coverts, also on uppertail coverts and tail feathers, bill black.



Uria aalge — Guillemot — a little bigger than Long tailed duck. Colour of upperparts is warmer and brown not black like in Brunnich's and Razorbill. Bill slender and pointed. Underwing whitish, in fly legs longer than tail. Winter plumage more white on head with dark line behind the eye. There are dark smudges on flanks.

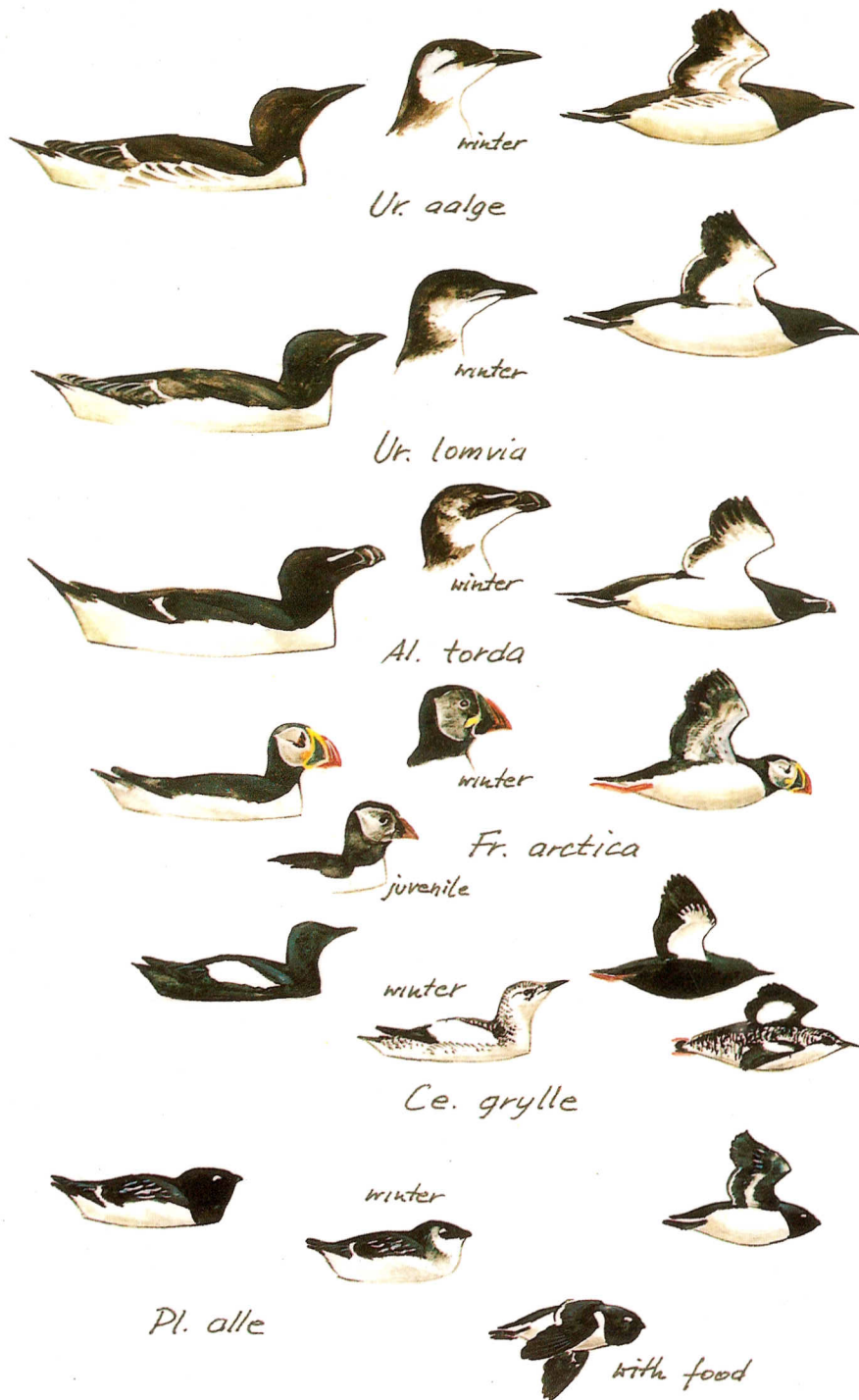
Uria lomvia — Brunnich's guillemot — distinctly black and white bird with white underwings. Compared to Guillemot bill distinctly higher and heavier with characteristic white line at the basal part. In fly slightly down pointed bill. Underwing whiter than in Guillemot. In winter plumage there is less white on head than in Guillemot. Flanks pure white.

Alca torda — Razorbill — clear black and white appearance, bird as big as Guillemot, but with higher and stouter bill. Tail pointed, longer than legs in fly, usually upturned when bird is on water.

Cepphus grylle — Black Guillemot — much smaller than Brunnich's Guillemot with plummy body. Adult in breeding plumage unmistakable. Juvenile and adult in winter plumage are black and white with barring and spotting. White patches on upperwing less clear in juveniles.

Fratercula arctica — Puffin — smaller than Brunnich's Guillemot, adult with unmistakable bill. In winter colours on bill less pronounced. Young birds with small bill, dark from distance and dark head. Rather long and rounded wings in fly.

Plautus alle (Alle alle) — Little auk — the smallest auk, very dark underwing and short plummy body. Juveniles similar to adults. In winter plumage head lighter.



Balaenoptera musculus — Blue whale — largest and rarest of the whales in the area. Characteristic powerfull and high blow.

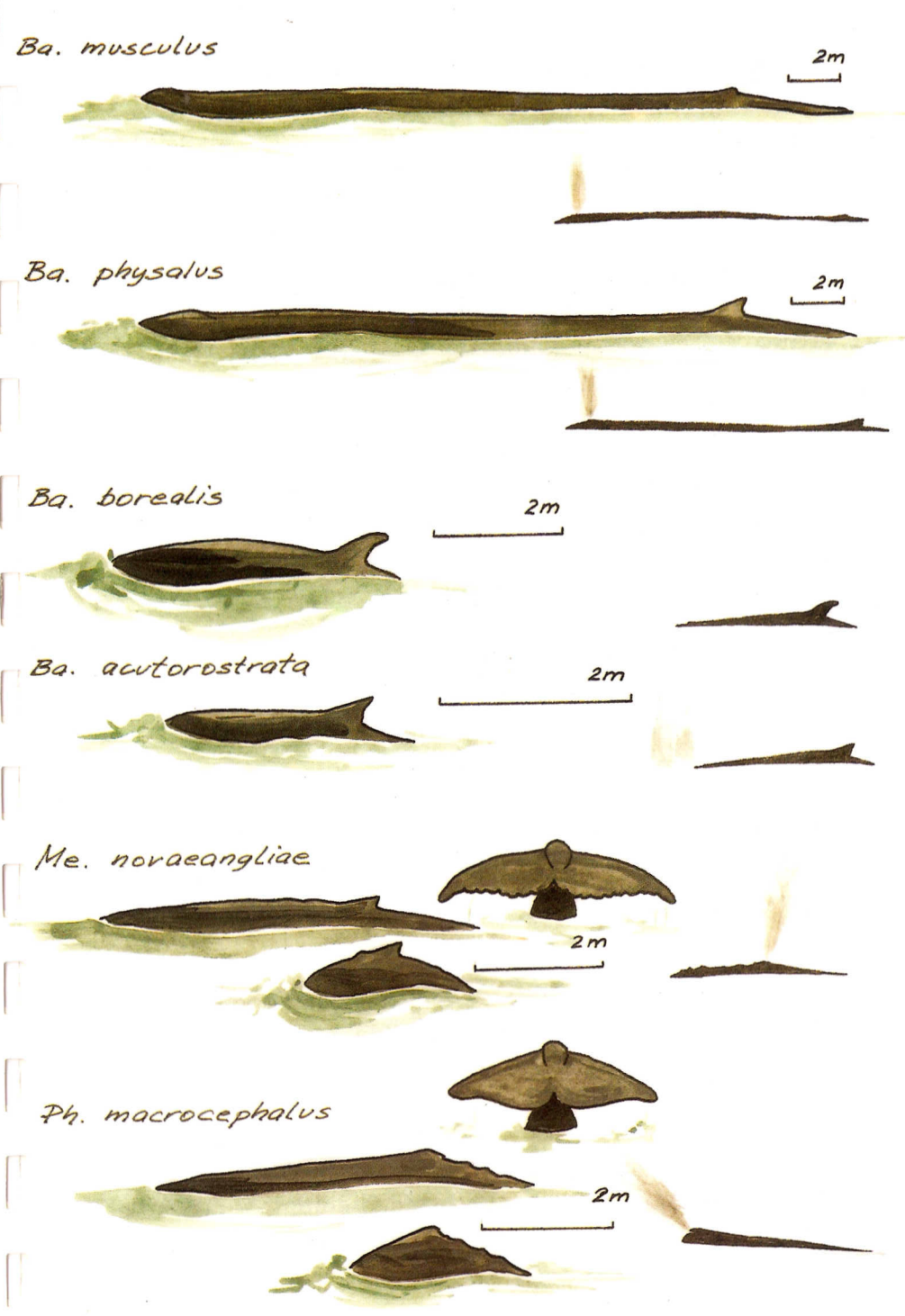
Balaenoptera physalus — Fin whale — grey back side, asymmetrical coloration of jaws, distinct dorsal fin.

Balaenoptera borealis — Sei whale — dark back side, dives not exposing caudal fin.

Balaenoptera acutorostrata — Minke whale — small, dark grey back, diving expose small dorsal fin, fontain low, unclear.

Megaptera novaeangliae — Humpback — black back, flat head with distinct tubercules, dives exposing from the water triangular hump.

Physeter catodon (*P. macrocephalus*) — Sperm whale — dark grey with charakteristic carinate back and square head. Often rests on the surface of the sea. Powerfull, directed forward fountain.



Monodon monoceros — Narwhal — immatures blue - black, adults dark mottled, characteristic sharp edged head and lack of the dorsal fin.

Balaena mysticetus — Bowhead — dark grey to black with white lower jaw, no dorsal fin, while swimming at surface two humps are visible, head without callosities, V-shaped blow.

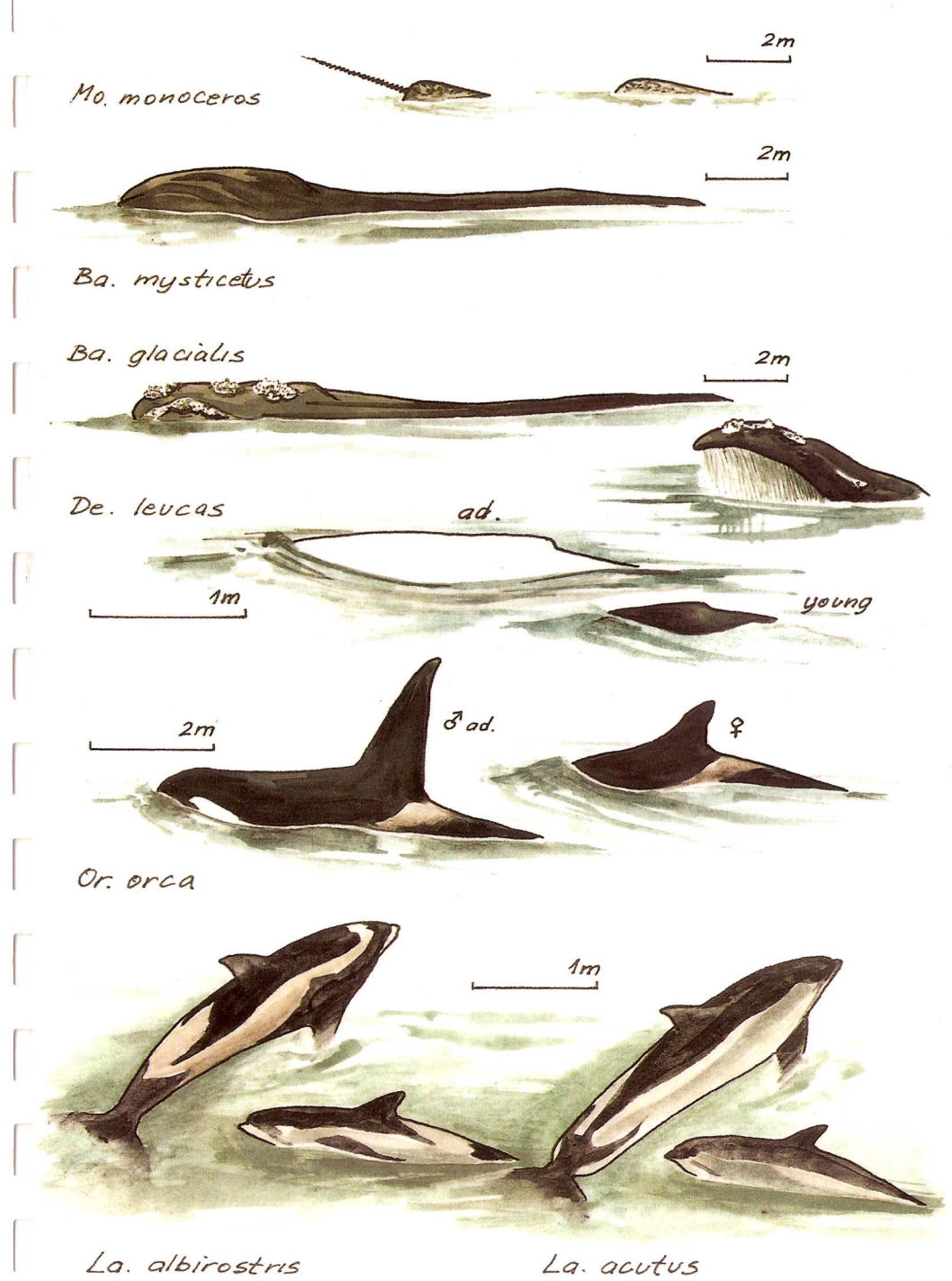
Balaena glacialis — Black right whale — black, characteristic whitish callosities on the head, low V-shaped blow.

Delphinapterus leucas — White whale — adults entirely white, juveniles brownish, small dorsal ridge.

Orcinus orca — Killer whale — pronounced dorsal fin, in males up to 2 m high, whitish spot behind the fin, white behind the head.

Lagenorhynchus albirostris — White beaked dolphin — dark back with whitish stripes also on the top of head, often white snout, swims in small packs of five to several tens of animals.

Lagenorhynchus acutus — White sided dolphin — dark back, light belly, dorsal fin sharp at tip, no light stripes on the top of the head and behind the dorsal fin.



Odobaeenus rosmarus — Walrus — dark brown, very large, in water characteristic sharp head edge.

Phoca hispida — Ringed seal — small seal with rounded head, black spots on the grey back, never hauls out on ground only on ice, occurs alone. Very similar but rare *Phoca vitulina* is more brown and often rests on stones or shore.

Phoca groenlandica (*Pagophilus groenlandicus*) — Harp seal — often swims in pods of some to several specimens, pointing heads from the water, often in large flocks on ice, never on beach.

Halichoerus grypus — Grey seal — large seal with long head, often rests on shore.

Erignatus barbatus — Bearded seal — large seal with prominent moustache, swimming alone, close to the coast.

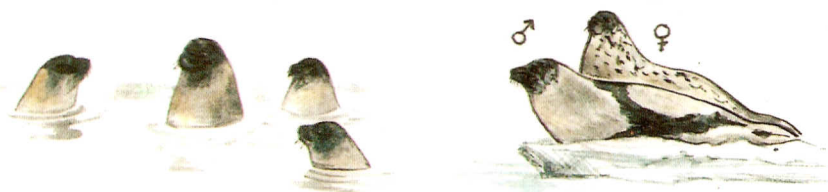
Cystophora cristata — Hooded seal — large seal, grey coat with dark patches over all body, occurs usually away from the coast.



Od. rosmarus



Ph. hispida



Pa. groenlandicus



Ha. grypus



Er. barbatus



Cy. cristata

