

KLAUS MALLING OLSEN

GULLS OF THE WORLD A Photographic Guide





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a photographic guide

Klaus Malling Olsen



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CONTENTS

ACKNOWLEDGEMENTS		
INTRODUCTION		
	Geographical area	10
	Sequence of species	10
	Subspecies	10
	General information on ageing of gulls	10
	Ages and moult	12
	Some problems in worn, moulting and diseased birds	17
	Colour abnormalities and oil staining	20
	Oiling	21
	Some notes on colour differences, light effects and bare part coloration	21
	Judging size and jizz – the first steps to field identification	24
	Judging photographs	26
	Hybrid gulls	26
INTF	RODUCTION TO THE SPECIES ACCOUNTS	28
TOP	OGRAPHY	30
THE	SPECIES ACCOUNTS	34
1.	DOLPHIN GULL Leucophaeus scoresbii	34
2.	GREY GULL Leucophaeus modestus	37
3.	FRANKLIN'S GULL Leucophaeus pipixcan	41
4.	PALLAS'S GULL Ichthyaetus ichthyaetus	46
5.	AUDOUIN'S GULL Ichthyaetus audouinii	51
6.	WHITE-EYED GULL Ichthyaetus leucopthalmus	56
7.	SOOTY GULL Ichthyaetus hemprichii	60
8.	LAUGHING GULL Ichthyaetus atricilla	64
9.	MEDITERRANEAN GULL Ichthyaetus melanocephalus	68
10.	RELICT GULL Ichthyaetus relictus	74
11.	COMMON GULL Larus canus	78
12.	KAMCHATKA GULL Larus (canus) kamtschatschensis	85
13.	MEW GULL (SHORT-BILLED GULL) Larus brachyrhynchus	90
14.	RING-BILLED GULL Larus delawarensis	96
15.	CALIFORNIA GULL Larus californicus	102
16.	PACIFIC GULL Larus pacificus	108
17.	BELCHER'S GULL (BAND-TAILED GULL) Larus belcheri	112
18.	OLROG'S GULL Larus atlanticus	116
19.	BLACK-TAILED GULL Larus crassirostris	120
20.	HEERMANN'S GULL Larus heermanni	125
21.	GREAT BLACK-BACKED GULL Larus marinus	129
22.	KELP GULL Larus dominicanus	136
23.	GLAUCOUS-WINGED GULL Larus glaucescens	143
24.	WESTERN GULL Larus occidentalis	153

25.	YELLOW-FOOTED GULL Larus livens	159
26.	GLAUCOUS GULL Larus hyperboreus	162
27.	ICELAND GULL Larus glaucoides	172
28.	THAYER'S GULL Larus thayeri	182
29.	AMERICAN HERRING GULL Larus smithsonianus	188
30.	HERRING GULL Larus argentatus	200
31.	YELLOW-LEGGED GULL Larus michahellis	213
32.	AZORES GULL Larus (michahellis) atlantis	222
33.	ARMENIAN GULL Larus armenicus	228
34.	CASPIAN GULL Larus cachinnans	233
35.	STEPPE GULL Larus (cachinnans) barabensis	243
36.	MONGOLIAN GULL Larus (vegae) mongolicus	247
37.	VEGA GULL Larus vegae	252
38.	SLATY-BACKED GULL Larus schistisagus	259
39.	LESSER BLACK-BACKED GULL Larus (fuscus) intermedius/graellsii	266
40.	BALTIC GULL Larus (fuscus) fuscus	274
41.	HEUGLIN'S GULL Larus heuglini	280
42.	LAVA GULL Larus fuliginosus	288
43.	BROWN-HEADED GULL Chroicocephalus brunnicephalus	290
44.	GREY-HEADED GULL Chroicocephalus cirrocephalus	294
45.	HARTLAUB'S GULL Chroicocephalus hartlaubii	299
46.	SILVER GULL Chroicocephalus novaehollandiae	302
47.	RED-BILLED GULL Chroicocephalus (novaehollandiae) scopolinus	305
48.	BLACK-BILLED GULL Chroicocephalus bulleri	307
49.	BROWN-HOODED GULL Chroicocephalus maculipennis	310
50.	BLACK-HEADED GULL Chroicocephalus ridibundus	314
51.	SLENDER-BILLED GULL Chroicocephalus genei	319
52.	BONAPARTE'S GULL Chroicocephalus philadelphia	324
53.	SAUNDERS'S GULL Saundersilarus saundersi	329
54.	ANDEAN GULL Chroicocephalus serranus	<i>3</i> 32
55.	LITTLE GULL Hydrocoloeus minutus	335
56.	ROSS'S GULL Hydrocoloeus rosea	341
57.	SABINE'S GULL Xema sabini	345
58.	SWALLOW-TAILED GULL Creagus furcatus	349
59.	IVORY GULL Pagophila eburnea	351
60.	BLACK-LEGGED KITTIWAKE Rissa tridactyla	354
61.	RED-LEGGED KITTIWAKE Rissa brevirostris	359
INDEX		

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▲ Black-headed Gulls. A common, easy to identify, small gull. Becoming familiar with an 'unproblematic' species is the first step into the puzzling world of gull identification. Baltic coast. Slavcic, iStock

INTRODUCTION

The gulls form a well-known bird family, with many widespread species but also some of the world's most soughtafter rarities. The group offers some notoriously difficult identification and taxonomic challenges, in the form of the 'large white-headed gulls', but also includes many beautiful and easy-to-identify species.

Studying gulls is a very special discipline in birding, although it is disliked by some, who consider gull identification to be too difficult and time-consuming. The expression 'you have to be madly in love to get into gull-watching' is very apt. However, when you are struck by the gull 'virus', gull-watching becomes an exciting challenge and great fun.

There is a great deal of individual variation among gulls, especially the larger species, and the 'rules' are not always enough. A few may have to be left unidentified on each gull-watching session, but be satisfied if you have been able to identify the majority of birds through the day. It may be best to leave the frustrations to the 'gull fundamentalists', who regard gulls as a religion and who may almost disregard any other kind of birding.

Studying gulls will make you a better all-round birder. Few other bird families offer so many age-classes between juvenile and fully adult plumage than gulls, and the larger gulls in particular reveal how much variation there can be within any given age-class. Getting to grips with this will add to your general birding skills and will benefit you in your studies of other bird families.

This book is a photographic companion guide to *Gulls of Europe, Asia and North America* (Malling Olsen & Larsson 2004). The aim of the book is to present identification in a more concise way, supported by numerous photos, the majority of which have never been published for a large readership before. The intention is not to present an authorised taxonomic update nor a bewildering mass of putative hybrids, aberrant individuals or atypical moulting gulls, although the text does mention certain cases and the photo section presents the commoner or more easily identified hybrids. Neither is it our ambition to present highly detailed descriptions of plumages, moult and measurements. For this, we refer to Malling Olsen & Larsson 2004.

Several websites deal with the smallest details of gull taxonomy and identification and present an enormous amount of photos, which can be used in combination with this book. The website Gull Research (www.gullresearch.org) is an invaluable source of information, with constant updates and an overwhelming amount of photos of Northern Hemisphere gulls. Here you will find links to other webpages specialising in gulls.



▲ Gulls gather at places with good food supplies. A perfect place to begin studying gulls is at a fishing harbour. As new boats arrive, new study-objects constantly appear! Hirtshals, N Jutland, Denmark, May. KMO

Geographical area

This book covers all gull species of the world.

Sequence of species

Generally, the sequence follows *Handbook of the Birds of the World* (del Hoyo *et al* 1990), but some exceptions and rearrangements have been made for practical reasons.

Subspecies

It is intended to describe all subspecies within a species that are recognisable in the field. In certain taxa where taxonomy is still unclear or just partly resolved, such recognisable taxa are treated in separate accounts. This is the case for Steppe and Mongolian Gulls, which in Malling Olsen & Larsson 2004 were treated as subspecies of Caspian Gull because of insufficient information at the time the text was prepared for that volume. Azores Gull, which was treated under Yellow-legged Gull, merits its own chapter, as does Baltic Gull (previously described under Lesser Black-backed Gull) and Kamchatka Gull (previously described under Common Gull). These taxa are readily identifiable, and further investigation is expected to confirm that they are separate species.

In cases where subspecific identification is only possible with birds in the hand, this is noted. Such taxa are not necessarily illustrated in the photographic section.

General information on ageing of gulls

Within its lifespan, a gull goes through several plumage stages. The time it takes for a species to reach full adult plumage varies. Generally, gulls can be divided into three categories in terms of ageing.

Two-year gulls These include most of the small hooded species. They take about 13–16 months to reach full adult plumage. From juvenile plumage, the mantle and scapulars are moulted into first-winter plumage in early autumn. A variably extensive moult of the head in late spring leads to first-summer plumage, which shows a varying dark hood. Between spring and summer, the bird moults into adult winter plumage and the following spring to adult summer plumage, showing a complete dark hood.

In most two-year gulls, young adults can differ slightly from full adults, for example in showing more extensive dark coloration in the outerwing (primaries, primary coverts) and sometimes less clean-looking plumage.



◄ A two-year gull. Blackheaded Gulls in winter. Adult in foreground, and behind a first-winter bird, which will moult to firstsummer plumage and then develop adult plumage. Note paler bare parts and dark-centered coverts in first-winter. Copenhagen, Denmark, January. KMO

Andean Gull in summer plumage. The dark hood is present before and during the breeding season in most two-year gulls. As breeding seasons in the northern and southern hemispheres are opposite to each other, summerplumaged gulls from the southern hemisphere show their summer hood in the last months of the year, and northern hemisphere gulls between March and July. Cochabamba, Bolivia, November. KMO



Three-year gulls Most medium-sized species fall into this category. They take 25–28 months to reach full adult plumage, and differ from two-year gulls in showing an easily identifiable second plumage (second-winter/ summer). This is similar to adult plumage apart from more extensive dark markings in the wing, especially outer primaries and primary coverts, and often traces of a dark tail-bar and generally duller bare parts with more extensive dark markings in the bill.

A three-year gull: Common Gull. To the right a juvenile (which in its first winter will show a grey saddle against the retained brownish juvenile upperwing), and to the left an adult. Second-year birds are similar to adult, but with larger extent of dark in wing-tip (including primary coverts) and generally less clean upperparts apperance. There may be traces of dark in the tail. Copenhagen, Denmark, November. KMO



Four-year gulls This grouping includes most large gull species. Here, the plumage development is slower with (at least) one more immature plumage before reaching full adult plumage. These species take at least 28–40 months to reach full adult plumage. Studies of birds of known age have proved that within this group, exceptions from general rules are common, with birds showing a bewildering mixture of characters from different age-classes, or traces of immaturity well into an older age, when adult plumage is expected to be fully developed. The variation is largest among second-year birds. Therefore: **age-classes between first-winter and adult should be regarded as generalisations only**.



▲ Plumage development in a four-year gull, showing winter plumages in Caspian Gull. From left to right, first-winter, secondwinter, third-winter, fourth-winter and adult. Note that the second-winter bird has a complete grey saddle; many four-year gulls at this age show barred upperparts or only a partly grey saddle. Netherlands. Ruurd J. van der Leij

Variation in age development may be caused by several factors, such as the general fitness of the bird and its access to food during the moult period. In some gulls, it is difficult to draw the limit between certain categories. In the species accounts, such species are described as 'two/three-year gull', or 'three/four-year gull'.



▲ Great Black-backed Gull. All large gulls can be considered four-year gulls. In this mixed group of Great Black-backed Gulls, the bird to the right is in fresh juvenile plumage with striking pale scaling in saddle. The black-and-white chequered birds in the background are in second-winter plumage. The birds with dull blackish saddles and parts of coverts are third-winters. The bird with clean blackish upperparts and yellow bill with red gonys spot is a full adult. N Jutland, Denmark, August. KMO

Ages and moult

Moult and age development in gulls can be regarded as a continuous process. However, in most northern hemisphere gulls, the moult is concentrated to between late spring and autumn with no or very little moult in winter. Thus, in most gulls, it is possible to distinguish plumages in summer and winter. In this book, the terms 'winter' and 'summer' plumages are preferred, and retained from Malling Olsen & Larsson 2004.

The sequence described below holds true for most gull species. Exceptions are mentioned in the species accounts, which also mention details in moult that are useful for identification.

► Juvenile American Herring Gull. In late summer, the entire plumage is fresh and uniform. Note dark-centred mantle and scapulars with pale edges. These parts are soon exchanged with first-winter feathers, which are paler with blacker, more distinct dark markings – as crossbars, triangles or streaks. Illinois, USA, August. Amar Ayyash



► First-winter American Herring Gull. Parts of mantle are renewed; note new paler mantle feathers with narrower but more distinct markings in contrast to worn juvenile feather parts. New York, USA, January. Ian Merrill

Juvenile is the first full plumage. Juvenile plumage is characterised by dark areas on the head and forebody and a scaly or dark-mottled, camouflaged pattern in the mantle, scapulars and upperwing coverts. The underwing is dark-marked in most species. The tail has black markings, mainly as a distinct tail-bar. The bare parts are dull and the eyes dark.

The following characters are diagnostic for juvenile/first-winter (first-year) gulls, and are retained until the onset of complete moult to second-winter plumage, beginning in late spring in the year after the bird hatches:

- Primaries are duller than in subsequent ages and their tips (especially those of the outer primaries) are pointed, at most with indistinct pale tips, showing up as a line of narrow chevrons in the closed wing.
- Lesser and median wing coverts in four-year gulls are dark with pale edges. Greater coverts have distinct pale and dark barring.
- Any mantle feathers/scapulars or coverts with full dark centres and narrow pale edges are juvenile.
- Tertials are brownish-tinged with rather regular pale edges, and no extra bars or spots.
- In larger species, any pale tip to the bill is confined to the extreme tip of the upper mandible.
- The eyes are dark.
- Contrast between fresh mantle/scapulars and older, juvenile upperwing coverts is evident from mid-autumn, gradually becoming stronger through the winter.



◄ First-winter Herring Gull. Aged by pale, crossbarred mantle feathers in slight contrast to wing coverts, distinct pale and dark barring in greater coverts, dark bill (lacking pale tip to both mandibles of older birds) and pointed tips to primaries. Zealand, Denmark, October. KMO

Juvenile plumage is partly retained through the winter. The mantle/scapulars ('saddle') and in some species a variable numbers of tertials and wing coverts are moulted into **first-winter** feathers in autumn. This means that they are adult-looking in two- and three-year gulls, and neatly dark-patterned (often barred) in four-year gulls (though note that in large Arctic gull species, juvenile plumage is often retained throughout winter, or moult is restricted to parts of the mantle and scapulars).

In four-year gulls, it has been demonstrated that first-winter feathers renewed early in the season are more juvenile-like, with broader dark markings, while later-moulted feathers are greyer with restricted dark markings. There are even indications that actual juvenile plumage may show similar development, with the latest fully grown juvenile feathers patterned more similarly to first-winter feathers than those grown earlier.

During autumn and winter, the head and breast become paler with wear. The bill-base and tip of the upper mandible also become paler. As autumn and winter progress, juvenile feathers – especially on the upperwing – gradually become worn and faded, in increasing contrast to fresher mantle feathers/scapulars during winter. By late winter and in spring, many medium-sized and large gulls have very worn and bleached coverts and flight feathers with the coverts almost completely lost through wear. Therefore a fresh bird in autumn may look strikingly different from a worn spring bird. This is especially true at this age, as juvenile feathers are of poorer quality than those grown in later plumage cycles. Smaller gulls often moult their central tail feathers into adult type in winter.



 First-summer Herring Gull. This plumage is basically worn first-winter. Aged by pale, cross-barred mantle feathers in slight contrast to wing coverts, dark-tipped bill (lacking pale tip to both mandibles of older birds) and pointed tips to primaries. First-summer large gulls with delayed moult look extremely worn, note especially worn and much faded primaries; greater coverts have been shed in this bird. Zealand, Denmark, July. KMO

Late spring sees the start of the first complete moult. The term **first-summer** may be considered artificial, as it describes the look of a worn or moulting first-winter bird, but is retained here in order to clarify how the birds look at this time, at about one year old.

Small hooded gulls may develop an adult-like hood in their first summer, but typically the hood is dull and incomplete and many retain the winter head pattern.

The first complete moult starts in late spring with the innermost primary (p1) and continues to the outerwing, with the last parts to be moulted being the outer primaries (p9–10) and inner secondaries by autumn. Normally, only one primary is moulted at a time, apart from p9–10, which may grow simultaneously. Moult of tail, secondaries and body is most extensive when primary moult has reached the mid-primaries, in midsummer. Tail moult normally starts with the central pair of rectrices, but the sequence of moult is less strict than in primaries. Coverts moult generally follows flight feather moult, but coverts are often moulted in groups, especially median and greater coverts, creating pale 'gaps' in the upperwing, a feature especially striking in gull species with dark upperwings. This sequence is repeated in subsequent ages, though moult then generally starts earlier.

Moulting birds from midsummer to early autumn look patchwork-like with a mixture of worn and faded juvenile feathers, appearing brown and dull, but with some new, fresh feathers. During this moult, small species (two-year gulls) gradually lose their juvenile plumage pattern. At this time flight feathers may appear very worn, appearing as spikes, especially in the kittiwakes and Little Gull.

Second-winter plumage is developed at about one year old. In two-year gulls, it is basically as adult plumage. Three-year gulls develop a readily identifiable immature plumage, which is similar to adult, but with more dark in the wing-tip, dark markings in primary coverts and sometimes also the tail, and duller bare parts.

In four-year gulls, this plumage is variable. Some are similar to firstyears, but the pattern in the upperparts, including coverts, is typically finer with more delicate barring and vermiculations. Greater coverts vary. In some, the pattern barely differs from juvenile coverts, whereas in others, the pale pattern is much finer and more vermiculated ('watered'), and some individuals have very dark, almost unpatterned greater coverts. In the saddle, uniform adult-type feathers may be present (sometimes all) but are often paler than in fully adult plumage. Problematic birds that look similar to first-years can be aged as second-years by the following features:

- Primaries black and rounded with white tips, appearing as white 'new moons'.
- Lesser and median coverts grey to pale brown with narrow but distinct dark markings as cross-bars, chevrons or spots.
- Tertials have black centres and broader white edges, often with extra bars, spots and vermiculations towards the tip.
- Bill has a broader pale tip, covering both mandibles.
- If eyes are bicoloured or pale, the bird is not a first-year.
- No contrast in plumage quality between mantle/scapulars and coverts, which are renewed more or less simultaneously.
- Tail generally has a more extensive, broader and blacker subterminal bar than in first-years.

► Second-winter Herring Gull. Compare with firstwinter. Aged by more finely patterned mantle feathers and greater coverts than in first-winters, pale tip to bill and rounded tips to blacker primaries. Eye starts to become paler. Compare with first-winter p.14. Zealand, Denmark, October. KMO



Note that individual variation at this age is enormous – within four-year gulls larger than in any other age-group. As noted above, retarded birds of this age may develop general plumage very similar to first-winters, whereas others look 'half-way' between juvenile and adult.

Second-summer is as worn second-winter, apart from fully adult hood in the hooded species and a white head in three/four-year gulls (variably spotted in winter), mainly because of bleached juvenile feathers, to a lesser degree by new white feathers. In many four-year gulls, the upperparts appear piebald with new uniform feathers of adult type in the saddle and coverts intermixed with heavily worn, pale immature-type feathers.



◄ Third-winter Herring Gull. Saddle and most coverts renewed to adult type, in contrast to some brown, faintly patterned coverts. The white primary tips are smaller than in adult and the bill duller with more extensive dark markings. Zealand, Denmark, February. KMO

Third-winter as adult in two/three-year gulls. Four-year gulls show a mixture between second-winter and adult plumage. Mantle, scapulars and a varying number of upperwing coverts are of adult type. Primaries have more dark/less white and narrower white tips than adult, there are dark markings in the alula, primary coverts and tertials, and the tail has traces of dark. Bill is pale with varying amount of dark; red gonys spot appears from spring. Eye as adult, but generally darker.

Third-summer as third-winter, but head white. Upperparts similar to adult, but with some worn, immature-type feathers intermixed in the coverts.

Fourth-year basically as adult, but some four-year gulls still show signs of immaturity, especially narrower white mirrors in primaries, dark markings in primary coverts and sometimes dark tail markings. Bill generally duller with larger amount of dark. This may be the case even in older ages; however, single immature traits have been proven to occur in birds up to 20 years old.



◄ Adult winter Herring Gull. The clean-looking grey upperparts and broad white tips to primaries are typical for adult four-year gulls. Note short wing-tip, caused by growth of outer primaries by late autumn. Dark head markings are retained into mid-winter. W Jutland, Denmark, October. KMO **Adult winter** This plumage shows no traces of immaturity, looking uniform and clean. Adult pattern depends on species, but in most four-year gulls head is variably dark-patterned, most extensive in species from N Atlantic and N Pacific, and least in species breeding between Mediterranean and C Asia, in which dark markings are often reduced to hindneck streaks. The bill is yellow with red gonys spot and often dark markings. The legs are of adult type.

► Adult summer Herring Gull. From winter to late summer, head is unmarked white and, at onset of breeding season, bill is brighter and cleaner yellow than in winter. At this time fleshy-legged species may develop yellow tint to legs. N Jutland, Denmark, May. KMO



Adult summer differs from adult winter in clean white head. The bill usually lacks dark markings and at onset of breeding season, bill colour is at its brightest, with bright red gonys spot. Even the legs are brightly coloured at onset of breeding season, when species with fleshy legs frequently develop a slightly yellowish tinge on the tarsus. The adult plumage remains basically identical for the rest of the bird's life. Very old birds often show slightly retarded plumage and poorer feather quality, giving an untidy look.

Moult differences in different geographical areas

Generally speaking, the more northerly a gull's breeding range, the less it moults following the breeding season. Herring Gulls breeding in the Arctic have a later and more restricted moult than those breeding in the southernmost part of the range. The moult differences are most evident in first-year birds. In juveniles, the autumn moult into first-winter plumage includes the mantle and scapulars (and in more southern populations some wing coverts), but many birds from the far north are still in fully juvenile plumage well into late autumn, as seen in Glaucous, Iceland and Thayer's Gulls and certain Herring Gulls from the Arctic.

The large white-headed gulls from furthest south in their species' range moult earlier in autumn than northern populations, as the breeding season is earlier. Many first-year Caspian Gulls in Herring Gull flocks reveal themselves by their more advanced moult, including not only mantle and scapulars, but also a number of wing coverts (at most very few in Herring), as well as much more worn coverts at a time when these feathers are still rather fresh in Herring, and indeed in more northerly populations of Caspian Gulls.

An exception from the rule concerns upland populations, which breed later than populations from lowlands and coastal areas. The upland-breeding Armenian Gull breeds and moults much later than coastal Yellow-legged Gulls, even though their breeding ranges are geographically very close.

Long-distance migrants generally moult differently to short-distance migrants and sedentary birds. Baltic, Heuglin's and Sabine's Gulls, and some Lesser Black-backed Gull populations, delay most of their complete moult in summer/autumn, resuming it when they reach their winter quarters. The migration is long and takes a lot of energy. On reaching the winter quarters they can access plenty of food and have long days to feed – ideal conditions for completing a moult. These birds effectively experience two summers a year, one while breeding and one while wintering.

Some problems in worn, moulting and diseased birds

First-year birds gradually wear out their plumage during the year, and in late winter to spring, many are much worn and faded in the juvenile feather parts, especially the head, upperwing coverts and primaries. This is especially true in gulls wintering in areas subject to strong sunlight and regular sand-blasting. In species with variable plumage tone, pale-patterned individuals become much paler and more bleached than darker-patterned individuals, as darker feathers better withstand rough weather conditions in winter. In paler birds, almost all trace of plumage pattern may disappear by late winter, and the strong wear to head and body plumage may alter the whole jizz and make the bill look disproportionately larger. Retarded birds with extremely worn plumage may eventually look extremely untidy, and often weakened.

In smaller gulls, wear is especially pronounced in Black-legged Kittiwake and to a lesser degree Little Gull, in which many first-summers have extremely worn flight feathers and tail, seriously impairing their ability to fly. Worn primaries are duller than fresh feathers and with restricted white tips, caused by wear, and identification characters like primary projection, position of wing-tip in relation to tail, and pale tips to primaries may be much less helpful.

Outerwing moult occurs in the months following the breeding season. When outer primaries are lacking or growing, the wing looks unexpectedly short with a strange pattern, caused by the lack of p9–10. Tail moult rarely alters the total length of the tail as the feathers are not all moulted at once.

In dark-winged gulls, white bars across the mid-wing are regular in autumn at a time when greater coverts are shed, and these are caused by the exposed pale bases of the underlying feathers that would normally be fully covered.



◄ Herring Gull near end of complete moult to winter plumage. Note that growth in outer primaries (p9–10) is simultaneous. During growth of outer primaries, the wing-tip appears 'atypical', with less black and lack of white mirrors in p9–10. Zealand, Denmark, October. KMO



◄ Adult Great Blackbacked Gull moulting into winter plumage. Note pale area in innerwing, caused by exposed bases to secondaries when greater coverts are shed. Primary moult has reached mid primaries; new fresh inner primaries; new fresh inner primaries are in contrast to worn outer primaries. Zealand, Denmark, September. KMO



▲ Herring and Great Black-backed Gulls near the end of moult to winter plumage. Note that p9–10 are growing, and wing-tip pattern thus differs markedly from birds with fully grown primaries. There is less black, and white mirrors are absent – they will appear when p9–10 are fully grown. Bornholm, Denmark, late October. KMO

Diseased gulls usually look lethargic and untidy, with the breast protruding and wings lowered (creating a jizz recalling Caspian and California Gulls), and typically appear emaciated. Such individuals are often approachable.

► Weakened large gull, probably Yellow-legged Gull. This bird shows the typical posture of weakened or unwell birds, with protruding breast and sloping stance with drooping wings. Such poorly or moribund individuals are approachable and reluctant to fly. Algarve, Portugal, September. KMO



Gulls with atypically long bills, showing a long decurved upper mandible, are quite frequent, especially in Herring Gull.

In extreme cases, hormonal dysfunction creates some very strange-looking individuals, for example firstwinter Black-headed and Mediterranean Gulls in autumn with a full adult summer hood and bill. Also, hormonal dysfunction may lead to active moult at unexpected times of the year.

Vagrants, turning up far away from their normal range, may adapt moult cycles similar to the local gull populations.

Colour abnormalities and oil staining

There are several reasons for paler-than-normal plumages, which occur regularly in gulls, especially in first-year birds.

Leucism is regular in gulls. All-white birds exist, but most show normal bare part coloration, less often paler and brighter. Fully leucistic birds are much rarer than those showing partial leucism, resulting in scattered white feathers or feather-groups in an otherwise normal plumage.



▲ This leucistic Franklin's Gull has a few normally patterned secondaries in an otherwise white plumage. Lima, Peru, November. KMO

More commonly, the entire plumage is much paler than normal with restricted dark patterning and just light shading on normally dark plumage parts. This is caused by reduced melanin pigment in the plumage, producing a paler-than-expected version of a given plumage. This abnormality is known as **dilution**. In cases of **browning**, a similar abnormality, the feathers have a normal concentration of dark pigment, but of poorer quality, and thus the feathers are prone to rapid wear and fading. By late winter and spring, it is generally impossible to distinguish dilution and browning.

A large gull with one of the mentioned abnormalities may superficially resemble the pale-winged gulls (especially Glaucous and Iceland Gulls), but would show traces of dark shading in the outerwing and especially in the tail. In all but extreme cases, bare parts are normally coloured. Such birds may be tricky to separate from genuine worn birds, or from hybrids in which a pale-winged species is involved.

Pure **albinism** is rare. It results in all-white plumage and atypically pale bare parts, such as red eyes. Rarer still is **melanism**, resulting in much darker plumage parts than usual. It usually affects only parts of the plumage, and is most frequent in the smaller hooded gulls. Best documented is the rare but regular occurrence of first-year Little Gull with all-dark upperwing-coverts; the same phenomenon has also been documented occasionally in Mediterranean Gull and Black-legged Kittiwake, and may be expected to occur – although exceptionally – in all smaller gull species. Other cases includes partly brown plumage, though this may be due to oil staining rather than pigmentation. Lack of melanin in the bill results in an unusually pale and uniform bill.

► First-winter Mediterranean Gull, showing melanism in upperwing coverts. This is a rare abnormality, which has only been regularly recorded in Little Gull. Malta, February. Michael Sammut



Oiling

Oil on the feathers is common, and especially so in pelagic gulls. In certain cases a large percentage of windblown Black-legged Kittiwakes are affected. Most often, oiled birds show a dark brown belly. In larger gulls, minor oiling may show as brown, elongated 'ear-spots', when the bird has attempted to clean its feet. On occasion this has caused identification problems with large gulls resembling Pallas's Gull. Other contaminants can also stain plumage.

Some notes on colour differences, light effects and bare part coloration

Many smaller gulls show a variable rosy tinge to the underbody, inviting confusion with the much sought-after Ross's Gull. The colour is probably caused by preen-gland oil being spread onto the feathers during preening. Another explanation is feeding on large quantities of crustaceans.

Dull light enhances the rosy tinge, whereas strong sunlight makes it less conspicuous. Therefore, the colour is often more obvious in the winter months.



► Black-headed Gull with rosy underbody. This coloration is the rule in Ross's and Slender-billed Gulls, but not always present in other smaller gulls. Note how strong the colour appears in overcast conditions. Copenhagen, Denmark, January. KMO

22 Introduction

Strong sunlight can make brown tones look 'cooler' and greyer than in dull light, and furthermore, pale grey often appears whitish, making exact judgement of upperparts coloration hard. Poor light has the opposite effect: pale grey may look darker than expected. Bright light on pale backgrounds such as snow, ice and sand also causes grey upperparts to appear darker than they really are.



◄ Juvenile Sabine's Gull in strong sunlight. Note brown appearance of upperwing coverts in strong sunlight, and compare with photo below. Gdansk, Poland, September. Mateusz Matysiak



◄ Juvenile Sabine's Gull. Overcast light makes coverts and mantle look darker than in strong sunlight; compare to photo above. Scania, Sweden, November. KMO

Importantly, upperpart colour is strongly affected by the angle against the sun: sunlit parts appear much paler than parts in shadow. Check this out with a group of gulls of the same species and you will see the difference, or compare photos taken from different angles. Strong head-light exaggerates the translucency of pale flight feathers.

In late winter, as the breeding season begins, large gulls often have very bright bare parts because of hormonal changes. Gull species with pink legs, such as Western, Great Black-backed and Herring Gulls, may show a faint or sometimes strong yellow tinge to the legs. At the same time, the orbital ring is brightest and broadest. The bill may be unusually bright yellow with a vivid red gonys spot. Herring Gulls with bright reddish bills and deeper red gonys spots have been noted (these have been nicknamed 'Toucan Gulls'). Several cases of unusually bright bare parts are also documented for smaller species.

Close-up study of large gulls offers opportunities to note differences in colour of the orbital ring. American Herring Gull (background) shows a chrome-yellow orbital ring, Thayer's Gull (foreground) purplish. Illinois, USA, January. Amar Ayyash

▶ Pink-legged large gulls may develop a slight yellow tint to the legs, especially at the start of the breeding season, as demonstrated here by the adult Great Black-backed Gull to the right. Hirtshals, Denmark, Sept. KMO



► Certain large gulls, especially Herring Gull, can show unusually intense bill colour, making bill appear bright reddish at distance. The reasons for this are still obscure. Zealand, Denmark, January. KMO



24 Introduction

Hormonal changes are not the only explanation for such atypical red coloration. High numbers of birds with reddish bills – and atypical orange-tinged bare parts in younger birds – have been noted in the vicinity of salmon farms, where salmon are fed with carotenoids (in order to turn their flesh deep reddish). However, the occurrence of such birds elsewhere has been rather random, so other factors may influence this abnormality.

Following the breeding season, bare parts become duller. The bill often then shows darker markings and a duller gonys spot – a pattern retained until the start of the next breeding season.

Judging size and jizz – the first steps to field identification

Apart from in the largest species, sexing is not possible in single birds and difficult even with a pair seen together. Male gulls are, however, larger than females with heavier and stronger bills, a more pronounced gonys angle and squarer heads. The wings tend to be relatively shorter than in females.

Glaucous Gull provides a good example. Males are larger, with squarish heads and wing-tips that fall almost level with the tail-tip. Females are smaller with weaker bills, rounder heads and longer wings, extending well beyond the tail-tip. Certain small females may be confused with Iceland Gull, whereas large males are in a league of their own. Most individuals show an intermediate appearance and may not be positively sexed in the field.



◄ First-winter male Glaucous Gull. Many males are large and heavy-bodied with flattish forehead and crown, small beady eyes and a strong, paralleledged bill. The wings are short, with little or no projection beyond the tailtip. W Jutland, Denmark, February. KMO



◄ First-winter female Glaucous Gull. Many females are small and neat with rounded head, centrally placed eyes and a slender bill. The wings are long and projection beyond the tail is often as long as the length of the bill. Zealand, Denmark, March. KMO ► With direct comparison, it is often possible to identify male and female. In this Herring Gull pair, the male has a stronger and broader bill as well as a more angular head than the female, which shows a rounder head and slightly smaller bill. Copenhagen, Denmark, June. KMO



Jizz and size are useful for identification in many cases, once learned. Among similar-looking species, jizz and size are less useful and should be combined with as many plumage characters as possible. Never rely on a single plumage character in the larger species, which are notoriously variable. Take a look at a group of younger Herring Gulls and you'll realise that no two birds are identical in plumage. Many will show a mixture of plumage characters from different ages, and there will be bewildering individual variation in plumage characters, partly based on how early and late in the year the feathers have been renewed. Explore the variation and try to sort out which characters are the most reliable for the majority of birds. With patience and experience, every birder develops his or her own skills. Sometimes it is better to trust yourself than the guide books or experts.

Iceland Gull with Herring and Great Black-backed Gulls. Great Black-backed often dwarfs Herring Gull, but Herring is still the prototype of a large gull. In this respect, most Iceland Gulls are midway between Herring and Common/Mew Gulls in size and shape. The first-winter Iceland Gull to the right shows Common Gull-like jizz in its head and bill proportions, deep breast and long wings. N Jutland, Denmark, Dec. KMO



A great benefit of gull-watching is that gulls are generally easy to study and photograph, and they are often abundant near human activities. Patience and experience are the keys to success when identifying gulls. When 'gulling', it may help to start at a place where few gulls are present. Close-up study of single birds helps you concentrate on the plumage features. Small fishing harbours are ideal locations for this – larger harbours and rubbish dumps can be a daunting prospect for the less experienced gull-watcher.



▲ Rubbish dumps offer the chance for close-up gull study – albeit in unattractive surroundings. At this British site, several species occur. Among the large gulls, those with the palest mantles are Herring Gulls ssp. *argenteus*, the bird in the middle is a Yellow-legged Gull, with a darker mantle, while the Lesser Black-backed Gull ssp. *graellsii* to the right is darker still. London, Britain, February. KMO

Judging photographs

It is usually easy to identify gulls from close-up, high-quality photos, such as those in this book. Less clear or distant shots are more problematic. Likewise, shots showing several individuals at different angles to the photographer can be difficult. As described above, the angle of light can strongly influence the look of upperpart coloration in particular – especially significant when similar-looking species are grouped together.

Hybrid gulls

Hybridisation is regular in certain gull populations. Most significant is the extensive hybridisation between Western and Glaucous-winged Gulls along the Pacific coast of North America, with up to 75% of populations in Washington and Oregon being of hybrid origin. Hybridisation is nowhere more extensive that in W North America, where hybrids involving Glaucous-winged, Glaucous and American Herring Gulls are regular. Where hybridisation is proved it is mentioned in the species accounts, except for the most extreme cases.

The enigmatic 'Kumlien's Gull' – sometimes regarded as a species in its own right or a subspecies of Iceland Gull, could also be considered a hybrid swarm between Iceland and Thayer's Gull, and is treated as such here (under Iceland Gull). In S Iceland, parts of the Glaucous and Herring Gull population are hybrids, and may even involve American Herring Gull, which may hybridise with Herring and Glaucous Gull. However, this is yet to be proved.

In the Old World, less hybridisation has been recorded. It is most conspicious in the case of Caspian Gull, whose breeding range has expanded to areas with Herring Gull colonies in E Europe in recent decades. This has resulted in about 50% mixed pairs and hybrids in certain locations in northern Poland.

In Asia, a certain degree of hybridisation occurs between Heuglin's and Vega Gulls. These are often treated as a population named *taimyrensis*, which in this volume is treated under Heuglin's Gull. A number of rarer cases are known and listed under each species.

Hybrids are often readily identifiable by their combination of genuine characters from the two parent species, but may look much closer to one or the other, or even look closer to an unrelated third species. Western x Glaucous-winged Gull and Herring x Great Black-backed Gull hybrids, for example, may be similar to Slaty-backed Gull. Some hybrids are almost identical to one of the parent species, and only identifiable by call, for example a hybrid Herring x Caspian Gull looking exactly like Caspian but giving the call of Herring. Even more difficult are back-crosses, producing a continuum of variants which are outside the scope of this book.

Having said this, hybridisation away from W North America is still rare and should not pose any serious identification problems for most gull-watchers. For gull aficionados, however, identifying hybrids is an ever-growing challenge and a source of both frustration and deeper understanding. ► Some hybrids are so bizarre that they do not look like any known species. This striking hybrid Ringbilled x Laughing Gull has entertained US birders for several years. Illinois, USA, April. Amar Ayyash



► Hybrid Glaucous x American Herring Gull. Note similarity to a darker Glaucous Gull, but the darker primaries, tail-bar and bill identify it as a hybrid (it is much too pale to fit pure American Herring Gull). California, USA, February. Richard Bonser

► Along the W coast of North America, a large percentage of the gulls are hybrids between Glaucouswinged Gull and other large gulls, especially Western. This adult has the jizz and head-shape of Glaucouswinged and Western Gulls, and combines the pale upperparts of Glaucouswinged with the blackish wing-tip of Western, making it rather straightforward to identify. Washington, USA. Michael Donahue





INTRODUCTION TO THE SPECIES ACCOUNTS

Each account follows a standard format.

Species number/species name/scientific name

Identification

A short introduction to the main characters for a single species. Dimensions, given in centimetres, are L = overall length from bill-tip to end of tail; **WS** = wingspan. These are not exact measurements, but should give an overall idea of the size range of the species. Full standard measurements for northern hemisphere gulls are given in Malling Olsen & Larsson 2004.

The most characteristic features of a given species are mentioned hereafter, concentrating on shape, jizz and flight characters. Comparison with similar-looking species can be found at the end of each species account.

Ageing Description of the plumages, from juvenile to fully grown (adult). Plumages are described thus: 'juvenile – first-winter – first-summer – second-winter' and so on, instead of the recently introduced '1st cycle, 2nd cycle' and so on (Howell & Dunn 2007). This latter method is based on moult sequence throughout the year, which we regard as less useful for a concise description of how a bird looks at any given time of the year. A '1st-cycle' bird in autumn, still in rather fresh juvenile plumage, but with several new second-generation feathers, looks strikingly dissimilar to a worn bird, still in its '1st cycle' in late spring.

Mantle and upperpart colour has been determined from the Kodak grey scale Color Separation Guide, and the grey scale (large) CAT 152 7662 1995. The grey scale runs from 0 (white) to 19 (black). Kodak 3–6 is pale grey, Kodak 6–8 medium grey, Kodak 8–10 pale slaty-grey, Kodak 12–14 dark slaty-grey and Kodak 14–17 slaty-black.

For general gull topography, see pages 31–32. In the descriptions, primaries are numbered outwards; the innermost primary is p1, outermost p10. The tail consists of 12 rectrices = 6 pairs. T6 is the pair of outer rectrices, t1 the central pair.

A few special terms used by gull observers that appear in this book are explained below.

Apical spots: white primary tips.

Mirror: white rounded spots near tips of outer primaries.

Necklace: alternative to scarf (see below).

Scarf or shawl: darker hindneck areas, contrasting to paler surrounding to suggest a scarf or shawl.

Skirt: some large gull species (especially from the Pacific) have long secondaries, and in settled birds these form a 'skirt' in the folded wing.

'String of pearls': small white or pale areas between black in the primary tips and paler basal parts, which creates white spotting in the wing-tip. For single feathers, also indicated as 'new moons' in topography illustration.

'Venetian blind': dark outer webs and pale inner webs in primaries, forming a streaky pattern in the spread wing, most evident from above.

Window: paler inner primaries, in contrast to darker outer primaries (and secondaries).

Voice

A short description of the most commonly heard calls.

Moult notes

A concise review of the moult sequence of the species. Note that if moult does not differ from the average description of moult mentioned above (Ages and moult), the treatment will be brief. However, if moult details are considered very useful for specific identification, it is treated in more depth. For a more detailed approach, see Malling Olsen & Larsson 2004. If important new information has been published after that volume, it is summarised in this chapter.

Geographical variation

A review of morphological and plumage differences between known subspecies and clinal variants, concentrating on features that are observable in the field.

Hybridisation

This section concentrates on the most frequent hybrids, with descriptions and identification guidance. Random cases regarded as exceptions are briefly described.

Status, habitat and distribution

A short description of breeding and non-breeding habitats, with notes on migration and occurrence, to be used in combination with the distribution maps.



Similar species

Describes the most likely confusion species at all ages, concentrating on where they differ from the subject species.

References

Source material and further reading on identification and distribution. Note that the reference list is shorter compared to Malling Olsen & Larsson 2004, which should be consulted for detailed references.

Photographic captions

The captions summarise the main identification points each image shows. Month and locality are given.

TOPOGRAPHY







▲ Black-legged Kittiwakes. Probably the most common gull, large swarms gather at food-rich, pelagic areas.



1. DOLPHIN GULL Leucophaeus scoresbii

L 43-46cm; W 102-106cm

Identification Three-year gull. A medium-sized, distinctive gull, appearing stocky with very heavy bill, strong body, short and broad wings with broad white trailing edge to innerwing and reddish legs. Upperparts greyish-black in adult, browner in younger birds. Bill very thick and strong with bulbous tip, largest in adult. Found in small groups near seabird colonies, associating with cormorants and Kelp Gulls. In flight compact and heavy.

Juvenile (Feb–Apr) Head and underbody sooty-brown, gradually becoming paler towards belly. Flanks mottled sooty. Upperparts dark sooty-brown with indistinct pale brown feather edges. Flight feathers blackish with pale tips to inner primaries and secondaries. Rump and tail white, tail with narrow black subterminal bar, not reaching t6 and frequently restricted to central tail. Bill dull greyish-pink with black tip. Legs fleshy to pinkish-orange. Eyes dark brown.

First-winter (Apr–Sep) Most retain juvenile plumage, but some have paler mottling in face and throat, pale greyish-brown neck and paler sides of breast, in weak contrast to grey lower breast. Belly sometimes whitish. Scattered mantle and scapulars grey, rest of upperwing juvenile. Bill fleshy with black tip.

First-summer (Sep–Nov) as worn first-winter before moult.

Second-winter (Oct–Jun) similar to adult winter, but less clean-looking; hood dark sooty-grey with slight pale mottling, especially on forehead. Hindneck whitish. Breast to belly greyish with brownish tinge. Upperparts sooty-black with brownish tinge, parts of coverts brown, especially lesser and median. Primaries brownish-black, at most with narrow white tips. White trailing edge to innerwing narrower. Eyes brown. Bill dull pinkish-red with blackish tip. Legs dull pinkish.

Second-summer (Jul–Feb) as second-winter; unlike adult, shows dark hood.

Third-year as adult, but some have dark markings in bill, brownish tinge to upperparts, narrower white trailing edge to secondaries and brownish-tinged eye.

Adult Underbody and underwing coverts pale lavender-grey. Has white eye-crescents above and below eye. Upperparts blackish-grey (Kodak grey scale 12.5–13.5). Tertials with broad white tips. Flight feathers black, primaries with white tips, secondaries with broad white tips forming striking white trailing edge to innerwing. Rump and tail white. Bill pinkishred, generally brightest in distal parts. Eyes white to pale yellow. Orbital ring red. Legs red. In **summer** (late Jul/Sep–Jan/Feb) head and breast pale lavendergrey, concolorous with underparts; frequently with indication of slightly darker hood and neck-ring. White eye-crescents indistinct. In **winter** (Mar–Jun) head with dull sooty mottling, or shows speckled hood. Eye-crescents more conspicuous than in summer. Bare parts generally duller than in summer.

Voice Hoarse and shrill, given in series with laughing quality.

Moult notes Adult moult to **winter** complete Feb-Mar. Moult to **summer** partial Jul–Sep, including head and body. **Juvenile** moult to **first-winter** very limited Mar–Sep, including minor parts of head, mantle, and scapulars. Moult to **first-summer** partial and rather extensive Mar–Sep, including head, saddle and some greater and median coverts. Moult to **second-winter** complete Oct–Mar, earlier than in adults.

Geographical variation None.

Hybridisation None known.

Status, habitat and distribution Scarce, restricted to southernmost part of South America northwards to Chiloé Island, Chile, and Puerto Tumbo, Argentina. Breeds in colonies of up to hundreds of pairs on inlets, along beaches and marshes, often near colonies of marine animals and seabirds. Outside breeding season gathers along shores, associating with other seabirds.



Mostly feeds by scavenging. Disperses slightly northwards outside breeding season. Vagrant to Concepción, Chile, and South Georgia. Similar species Characteristic within range. References Burger *et al* 1996, Higgins & Davies 1996, Howell & Dunn 2007.



▲ 1 Juvenile. Note brownish plumage with very narrow pale scaling to upperparts (often absent). Bill, eyes and legs dark. Tierra del Fuego, Argentina, March. Alan Tate



▲ 2 First-winter. Similar to juvenile, but note darker hood, mottled hindneck and grey first-winter mantle and scapulars in slight contrast to browner juvenile coverts with indistinct pale edges. Ushuaia, Tierra del Fuego, Argentina, August. James Lowen





◄ 3 Juvenile moulting into first-winter. Note uniform brown upperparts and head, white trailing edge to wing and white tail with dark restricted to central tail. Santa Cruz, Argentina, March. Roberto Güller

▲ 4 Second-winter. Similar to adult, but note orange-tinged bill, brown eyes and scattered brown coverts. Tierra del Fuego, Argentina, January. Roberto Güller