

## Icelandic eiders—a few observations

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### Introduction

These notes are based on a visit, 25–29 May inclusive, in 1972, to the eider farm of Gisli Vagnsson, at Mýrar, on the north side of Dyrafjord in northwest Iceland. After previous experience with nesting wild eiders in the Baltic, in northern New England, the Canadian high arctic, Hudson Bay, and the Bering Sea region, it was a tremendous experience to be able to dispense with a hide, or blind, and to stand for long stretches of time, quietly, surrounded by hundreds of pairs of nesting eiders. One became more or less a part of the landscape, or perhaps was assumed to be a scarecrow (or should I say scareraven?), while the birds went about their affairs at one's very feet. It was the time of year when

the drakes were keeping station ashore near their incubating mates (Figure 1).

### Predation

Such predators as large *Larus* gulls and Ravens are shot, throughout the nesting season, and there were several scarecrows on the eider flats. Ravens were shy of a man with a gun; they flew over frequently—once a flock of twenty-four—but I never saw one alight where the eiders nested. The mink *Mustela vison* is said to occur and to be a predator; it is hunted with dogs. At some Icelandic colonies small cubicles are built, of flat stones, and many of the ducks nest in these shelters, but not at Mýrar. I asked Gisli about this and he said that they were

**Figure 1.** The farm of Gisli Vagnsson: view from the flats where the eiders nest toward the

farm buildings. The principal crops are sheep (and wool) and eiderdown.

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unnecessary; there is minimal predation while the birds are ashore. But he said that predation, especially by the Great Black-backed Gull *Larus marinus*, is very severe on ducklings after they reach the sea. At the colony I did not see a single sick, injured, or dead eider, nor any evidence of nests having been robbed of clutches.

### Feeding

In disturbed colonies off the Maine coast the drakes are ashore very briefly, usually only in company of the duck when she is laying; most of their limited sojourn is spent close by on the sea. In the Baltic at Utholmen, near Gotland, a few spend some time ashore, but mostly they remain on shallow water near shore. As in Maine, the duck joins her mate on the sea when off-duty. At both localities I have watched the birds (both sexes) on the sea, over several days. Sometimes they appeared to be feeding; at least they were up-ending in shallows and tidal pools, but I could not be sure that they ingested any food. There never was the lively activity ordinarily associated with intensive feeding.

At Gisli's farm small, somewhat weathered, patches of ground-up marine shells were scattered in and near the nesting areas. Presumably the birds defaecated these when they first came ashore. While I was at the colony, flying eiders seldom went as far as the waters of the fjord; usually they circled over the flats. Nor when standing in view of the fjord did I see any traffic to or from salt water. The meltwater pools and streams in and near the nesting area, which get much usage by the birds, are probably very low in oxygen content and contain no animal life whatever. The few ducks that 'defaecated' when frightened from their nests (most did not react this way) produced only a very thin watery liquid. I watched the ducks during their off-duty visits to water and could not observe that they defaecated either ashore or afloat, nor did I find any evidence in quiet shallow pools of faecal matter in suspension or on the bottom. Both sexes drank fresh water regularly, but ate nothing while ashore—at least while I was there.

### The eider's 'sails'

All eider species have a cycle of two moults annually. At least in the 'large eiders'

*Somateria*, the feathering of the head-body is renewed twice—with the notable exception that the modified long scapulars ('sails') are renewed only once and this renewal apparently is offset temporally from either period of moulting of the adjacent feathering. (The tail and wing also are renewed only once per cycle.) The duck has her 'sails' (concealed, or at least not erected) even after the spring period of moulting into Basic ('eclipse') head-body; the drake then is wearing them also, while otherwise in Alternate ('display') head-body plumage.

In Reykjavik, while waiting for the weather to clear for the flight to Thingeyri (the trip from there to Mýrar is by auto), I spent several days observing the free-flying wildfowl at the lake, Tjörnin, in the city. People bring bread here to feed the various waterfowl and a few of the eiders actually will climb onto one's knee and take food from the hand. If a group of eiders swam by, and the birds quarrelled for any reason, sometimes a drake's 'sails' would become erected and then would gradually lower so as to vanish among the other white feathers of the back. Their erection, on yearling and older drakes, seemed to be an involuntary reaction during a stress situation. I saw it happen again, repeatedly, among the nesting pairs at Gisli's farm. At first it was rather startling to be photographing a drake whose 'sails' were up and then soon to find that my subject had a smoothly-contoured back. When a hybrid (King × Common) drake performed his Pushing display in the direction of a drake Common, the latter's 'sails' appeared, only to vanish during quieter spells. Now and again somebody adds to the list of subspecies of Common Eider having 'sails.' From examination of museum skins, however, it is obvious that they are present in both sexes of all of the Common Eiders. Apparently they are not erectile in the duck. In the drake, it is probable that they are erected (or kept erect) during periods of tension or stress—such as pair-formation, defence of mate, and so long as the drake remains near the nest. Later, when drakes (or the sexes together) are flocking on the sea, their backs are smooth.

### The trek to water

At the eider farm it was quite evident that a duck could cover her clutch and then, quietly, and by careful choice of route, make her way to water without creating a

commotion. The drake followed, afoot or, to avoid conflicts, by taking wing. On reaching water, the duck immediately performed a double Wing-flap and, soon after, drank and Splash-bathed. The drake might swim before doing a Wing-flap. If a duck got off her eggs in a state of apparent excitement, croaking and flipping her bill (Inciting), and headed for water, this created much disturbance. As she passed near pairs, the drakes, even sometimes their mates, took after her, squabbling. An increasing tangle of birds moved on to water. The duck would Wing-flap and begin to bathe. Her retinue would then disperse and soon return to their nests.

Incidentally, sometimes as I moved slowly past a nest, the sitter would wait until I had gone by, then get up hastily, Wing-flap, and move away. The sudden Wing-flap behind one's back can be quite startling. Then, as I moved farther away, the bird usually would return and settle on her eggs; some, however, went to water.

### Recruitment

When the number of nesters is increasing in a colony, one would expect a large percentage in the youngest year-class (cohort); the reverse was to be expected at Gisli's farm. The colony had been in existence since at least 1912. Numbers reached a peak of 6,200 pairs in 1964 and, for reasons unknown (oiling of birds while at sea is suspected) had declined to 4,300 pairs in 1972.

In trying to examine several hundred females without disturbing them from their eggs, I could not be sure as to which were younger birds. It may be that those of the youngest cohort are darker or more muted in overall colouring, or have less (sometimes no) white at the tips of their secondaries. This white wears off the exposed (outer) webs; that remaining on the inner may not be visible on the folded wing. There was much variation in overall colouring, some ducks being dark and nearer neutral-coloured, others varying to a quite rufescent brownish. Occasional birds were quite pale, in part due to bleaching. Some of the dark birds showed two full wing-bars; some of the brown and pale birds did not. Usually, however, the matter was not determined because the ends of the secondaries could not be examined properly without actually handling the bird.

### The King Eider

Speaking in the vernacular, the King *Somateria spectabilis* is a high-octane eider—the drake's dorsal 'sails' are permanently erect, pointed, and sometimes vibrate; displays are much faster in tempo than those of the Common Eider; the frontal lobes and various feathering are 'exaggerated' in character; even the voice is speeded-up so that the cooing has a trembling quality. The few drake Kings that form pair-bonds with female Commons and then accompany their mates to the great Icelandic colonies of the latter are regarded as quarrelsome. There is an old Icelandic belief that the drake King really is an aged and changed Common Eider, a crotchety and overbearing individual—a king! At Gisli's farm, in the case of a triobond of two drakes (King and Common) sharing a female Common, relationships appeared to be amicable; the King usually kept station farther from the sitting female than did the Common. If another drake (Common) approached, the King would swiftly attack at a greater distance than seemed to be the case with Commons. During actual fighting, both species seemed to act in a similar way and with equal speed.

The writer has observed and photographed wild Kings of both sexes, separately and together, in near-desert high arctic environment. There the King accompanies his mate ashore when she is laying. However, in such exposed situations in the wild where predation is a constant hazard, so conspicuous a drake is unlikely to spend much time near his mate when she is incubating. He keeps station for a time on nearby fresh water. Thus it is an unusual situation in northwest Iceland, where a few drake Kings more or less behave like those Commons that have entered into a symbiotic relationship with man.

The drake Common has soft feathers on its cheeks which are quite puffed out in times of tension. On the drake King the corresponding feathers are different, being plushlike (as they were to a lesser extent on the extinct Labrador Duck). One day at Gisli's I kept edging nearer to a drake King, to get close-up photos. The bird became disturbed, got up, and moved several metres farther from his mate, but soon settled down. I approached again. The drake raised his head, turned it sideways, and erected the plushlike cheek-feathers in



**Figure 2.** Drake hybrid King  $\times$  Common Eider, mated to a Common Eider who was incubating four eggs.

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an anterior direction. This caused a 'break' in the feathering along or near the black line down rear of cheek—a V-shaped trough or opening. A similar effect is obtained when manually moving the edge of the facial disc of an owl to examine the ear-opening underneath.

#### **Hybrids**

Drake crosses of King  $\times$  Common Eider, and occurrence of mated mixed pairs

(Figure 2), have been known for a long time. Localities for these extended at least from Novaya Zemlya to Spitzbergen to northwest Iceland. It is believed that mixed pairs produce few progeny. Only drakes are known. Although I searched in Gisli's colony, I did not see a female having any recognizable King Eider characteristics—but any such bird would be easy to miss.

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