

rest must now follow suit: we really do not have much time left if we are to secure the White-headed Duck's future.

#### References

- Balharry, E., Staines, B. W., Marquiss, M., & Kruuk, H. 1994. *Hybridisation in British mammals*. JNCC Report No. 154. Peterborough.
- BirdLife International. 2000. *Threatened Birds of the World*. Barcelona.
- Cade, T. J. 1983. Hybridisation and gene exchange among birds in relation to conservation. In: Schoneveld-Cox, C. M., Chambers, S. M., MacBride, B., & Thomas, L. (eds.), *Genetics and Conservation*. California.
- Engilis, A., & Pratt, T. K. 1993. Status and population trends of Hawaii's native waterbirds, 1977-1987. *Wilson Bull.* 105: 142-158.
- Gillespie, G. D. 1985. Hybridisation, introgression, and morphometric differentiation between Mallard (*Anas platyrhynchos*) and Grey duck (*Anas superciliosa*) in Otago, New Zealand. *Auk* 102: 459-469.
- Hughes, B. 1996. *The feasibility of control measures*

for North American Ruddy Ducks *Oxyura jamaicensis* in the United Kingdom. Department of Environment, Bristol.

- , Criado, J., Delany, S., Gallo-Orsi, U., Green, A. J., Grussu, M., Perennou, C., & Torrel, J. A. 1999. The status of the Ruddy duck (*Oxyura jamaicensis*) in the western Palearctic and an action plan for eradication, 1999-2002. Wildfowl & Wetlands Trust Report.
- IUCN. 2000. *Guidelines for the Prevention of Biodiversity Loss Caused by Alien Invasive Species*. Gland, Switzerland.
- Meredino, M. T., & Ankney, C. D. 1994. Habitat use by Mallards and American Black Ducks breeding in central Ontario. *Condor* 96: 411-421.
- O'Brien, S. J., Roelke, M. E., Yuhki, N., Richards, K. W., Johnson, W. E., Franklin, W. L., Anderson, A. E., Bass, O. L., Belden, R. C., & Martenson, J. S. 1990. Genetic introgression within the Florida Panther *Felis concolor coryi*. *National Geographic Research* 6: 485-494.
- Randi, E., & Bernard-Laurent, A. 1999. Population genetics of a hybrid zone between the Red-legged partridge and Rock partridge. *Auk* 116: 324-337.

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### The Iceland Gull complex in Greenland

McGowan & Kitchener (2001), in their historical and taxonomic review of the Iceland Gull *Larus glaucooides* complex, suggested that the form *kumlieni* is a hybrid population between the subspecies *glaucooides* and *thayeri*, a hypothesis which I find very convincing. I should like to supplement their review with some recent and mainly unpublished information from Greenland, where all three subspecies occur.

The common and widespread large gull in low-arctic Greenland is *glaucooides*, breeding colonially along the coasts as far north as 74°N in west Greenland and 66°N in east Greenland. It may, however, breed even farther north in west Greenland, since I saw a pair feeding newly fledged young in the Thule district (77°N) in 1995.

Ten years ago, *kumlieni* was considered a rare vagrant to Greenland, mainly in winter, with only nine published records (Boertmann 1994). These included a rather strange breeding record, involving a chick captured in west Greenland, and held in captivity in Austria, which showed *kumlieni* wingtip markings when it attained adult plumage (Goethe 1986). A recent increase in observations at Nuuk, west Greenland (64°N),

however, has revealed that *kumlieni* occurs regularly throughout the winter, from mid-August to early May, in small numbers (up to 1% of the number of *glaucooides* present). Farther north still, in the Disko Bay area (69°N), in late April 1996, I saw at least ten different adult *kumlieni* among thousands of *glaucooides* attracted to a fish factory. These ten showed a marked variation in wingtip melanism (ranging from one dark grey outer-primary vane to almost black markings on the upper side), as well as in iris colour (ranging from pale to dark, and not correlated with wingtip melanism).

During the summer, on the other hand, although I have observed tens of thousands of Iceland Gulls since 1974, in almost all parts of west Greenland, I have seen only one *kumlieni*, in the Thule district in 1998. In the summer of 2001, however, a *kumlieni* was found brooding in a colony of *glaucooides* and Kittiwakes *Rissa tridactyla* near Nuuk (M. Kviesgaard & L. Witting in litt.); unfortunately, its mate was not seen.

The westernmost form, *thayeri*, bred in small numbers in the Thule district, in northernmost west Greenland, in the 1920s and 1930s (Salomonsen 1950). In recent years,

many ornithologists have worked in this area, but have never reported *tbayeri*, although I have urged them to look for this particular taxon. The only published records of *tbayeri* from this district in recent years are of a small number of individuals seen in early autumn 1987 at Thule Air Base, and a few adults which I saw at the same site in 1994 and 1995. Outwith the Thule district, *tbayeri* has been recorded a few times in spring and summer in the central and northern parts of west Greenland (Boertmann & Mosbech 1999).

All in all, therefore, *glaucooides* is the widespread and common subspecies of the Iceland Gull in low-arctic Greenland. The intermediate form, *kumlieni*, seems to be increasing as a winter visitor (although this could also be explained, at least in part, by

an increase in ornithological activity during the same period), but only two breeding records are known. The form *tbayeri* has probably disappeared from Greenland as a breeding bird, but occurs as a spring and summer vagrant.

#### References

- Boertmann, D. 1994. An annotated checklist to the birds of Greenland. *Meddr. Gronland, Bioscience* 38.
- & Mosbech, A. 1999. Unusual ornithological observations in West and North Greenland 1992-1998. *Dansk Orn. Foren. Tidsskr.* 93: 145-152.
- Goethe, F. 1886. Zur Biologie, insbesondere Ethographie der Polarmöwe (*Larus glaucooides* Meyer, 1822). *Annalen des Naturhistorische Museums in Wien* 88/89 ser. B: 113-146.
- McGowan, R.Y., & Kitchener, A. C. 2001. Historical and taxonomic review of the Iceland Gull *Larus glaucooides* complex. *Brit. Birds* 94: 191-194.
- Salomonsen, E. 1950. *The Birds of Greenland*. Copenhagen.

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### A further comment on House Crows

In his recent letter, Bill Bourne graphically defined the threat associated with the spread of House Crows *Corvus splendens* (*Brit. Birds* 94: 291). Having monitored this species' range expansion (which has been mainly ship-assisted) since the mid 1980s, I can confirm that it has attained pest status virtually everywhere where a population has become established, as a predator of native bird species, a crop-raider, a potential public-health risk, and a general nuisance. As a consequence, control/eradication programmes have been or are being initiated in many areas. A sobering fact is that, to my knowledge, only one of these campaigns can really be considered to have been successful; this is in the Seychelles, where the small breeding population seems to have been eradicated, although there may still be some stragglers. On the other hand, the 'shoot-on-sight' policy adopted in Australia has proved very successful in preventing House Crows from becoming established there, despite numerous arrivals during the twentieth century on board ships from the Indian Subcontinent.

The House Crow's spread has been sum-

marised in the British Ornithologists' Club Bulletin (*Bull. BOC* 114: 90-100; 115: 185-187), with an update shortly to be submitted. According to my records, the species has so far established breeding populations in about 20 countries outside its native range, while solitary individuals have turned up in about ten others.

With regard to the population in the Netherlands, I would tentatively recommend a precautionary approach, with the aim of eradication while this is still possible. The most likely scenario is, however, that the House Crows will remain a local attraction to birdwatchers. If the Dutch population does expand, it seems probable that nothing will be done until it is too late to take any effective action without great difficulty. Having been labelled 'crowist' a few years ago by the editor of a leading wildlife magazine, I am reluctant to make other than guarded statements on this topic.

Incidentally, *splendens* is, in fact, a rather appropriate name for the species, since it refers to its shiny plumage, and not to its behaviour.

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