



By far the commonest crane wintering in Japan is the hooded crane. The majority of its world population migrate to Arasaki in south-west Kyushu from north-east China and Russia via the Korean peninsula. Each year they are joined by around 1,500 white-naped cranes (see inset). The total flock in excess of 10,000 birds makes the reclaimed fields and marshes at Arasaki a crucially important Asian "wetland" well deserving of Ramsar status.

tion, and of no other value.

Thanks to drainage, reclamation, pollution or over-exploitation, wetlands are amongst the most threatened habitats in the world. However, wetland destruction and degradation has received little attention, particularly in Japan. Yet the huge numbers of filter-feeding animals that live in tidal flats and salt marshes purify water by consuming immense quantities of plankton and organic detritus. Loss of these precious habitats and their water-cleansing capacities ultimately damages the marine food chain, on which, ironically, the Japanese are particularly dependent.

Japan, like many developed countries, has already lost most of her wetlands. Those left are scattered, like isolated stepping stones, and are threatened. No fewer than 85 of these remaining wetlands, amongst the most important in Asia, have been declared of international significance and worthy of designation as Ramsar sites.

Japan is a crucial link in a chain of feeding and resting sites for long-distance migrants. The entire length of the archi-

pelago forms one arm of the East Asian flyway, while another arm of the same flyway passes up through the Nansei Shoto, Kyushu and the Korean Peninsula. Kyushu, the most southern of Japan's main islands, lies on both of these branches and so wetlands here have a double significance. Yet Kyushu's wetlands are dramatically under-protected and over-threatened. The crisis facing Japan's wetlands is an international one.

One imagines that, in a nation so dependent on marine resources for food, not only fish, but also shellfish and for seaweed cultivation, there would be the highest concern for the survival of an ecosystem which, amongst other things, helps to purify in-flowing river water, and reduces nutrient overloads in shallow waters. The purifying capacity of the tidal flat biota is immense, so great as to be incalculable, yet paradoxically the value of wetlands has been largely ignored in Japan.

The rate of loss of coastal wetland habitats alone in Japan is a depressing one. The result of four decades of targeted



continuous development has meant that 35 percent of tidal flats were drained and reclaimed between 1945 and 1978 and a much larger percentage degraded. Yet none of Japan's four wetland sites protected under the Ramsar Convention are coastal. In fact, by 1989, on the four main islands, less than half the entire sea coast was in a natural state. At the current rate all of Japan's natural sea coast, salt-marshes and tidal flats included, will be gone within 65 years.

MENTION JAPAN and wetlands in the same breath and most naturalists can summon up images of flocks of graceful snow-dancing Japanese cranes in their Hokkaido homeland, where, dependent on the