## [Japanese Cormorants]

Q1: Which of these birds is a Japanese cormorant?

Q2: What do Japanese cormorants eat?

Q3: Where do Japanese cormorants live?

Q4: What is a "new bird" (shintori)?

Q5: How long do Japanese cormorants live?

Q6: Do Japanese cormorants live in colonies, or are they solitary?

## A1:

Of the roughly 40 species of cormorants in the world, four are native to Japan. The Japanese cormorant, largest of the four and native only to the Pacific Ocean from Taiwan to the Russian Far East, is the species used by cormorant fishermen on the Nagara River.

(center)

Japanese Cormorant

Phalacrocorax capillatus

The Japanese cormorant averages 85 centimeters in length (head to tail). Juvenile birds, up to around two years of age, are brown with white-mottled necks and breasts. Adult birds, three years and older, are solid black with a subtle green sheen. They have white cheeks and small patches of yellow beneath their eyes. Though seldom vocal, Japanese cormorants will utter a raucous, gargling call when their nests are approached. In the wild, they inhabit rocky coastal shores and cliffsides.

(left)

Red-Faced Cormorant

Phalacrocorax urile

The red-faced cormorant is smaller than the Japanese cormorant, averaging 75 centimeters in length. Its name refers to the large patch of red skin surrounding its eyes, which is most vivid during the breeding season. Its plumage is black with a blue-green or violet sheen, and during the breeding season both males and females display feathered crests on their heads and necks. The red-faced cormorant lives in rocky areas along the coast of Hokkaido.

(upper right)

Pelagic Cormorant

Phalacrocorax pelagicus

The pelagic cormorant is roughly 73 centimeters in length on average, the smallest cormorant species native to Japan. It can be difficult to distinguish from the red-faced cormorant, but its crest is smaller, and its face loses its red coloration outside of the breeding season. Its plumage is solid black with a bluegreen iridescence. Like the red-faced and Japanese cormorants, it lives on rocky coasts, and the species often intermix.

(lower right)

**Great Cormorant** 

Phalacrocorax carbo hanedae

The great cormorant is nearly as large as the Japanese cormorant, reaching around 82 centimeters in length. Its shape and coloring are also similar to the Japanese cormorant, but the patches of bare skin below the corners of its mouth are more rounded. The most telling difference between the two species is their respective habitats—instead of rocky coasts, the great cormorants of Japan prefer the banks of inland lakes and rivers.

A2: Japanese cormorants eat fish of all kinds. They are excellent divers, able to swim 3 to 4 meters per second in pursuit of prey. In rivers, they catch not only *ayu* (sweetfish) but also eels, dace, and many other freshwater species. In the ocean, they dive to depths as great as 30 meters to catch sand lance, sardines, anchovies, and mackerel.

A3: Japanese cormorants are native to coastal Russia, the Korean Peninsula, and Japan. In Japan, they winter in areas south of the Tohoku region, then migrate northward to breed on islands in the Sea of Japan along the Sanriku coast, and in Hokkaido. Their breeding grounds are shown in orange on this map.

A4: *Shintori*, or "new bird," is the term used by cormorant fishermen for a newly arrived, wild-caught juvenile cormorant. The birds are caught in Ibaraki Prefecture in the autumn, then shipped to the cormorant masters' residences in winter. Newly caught birds are generally around two years of age, as indicated by their brown-and-white coloration. They are trained for two to three years before becoming full-fledged members of the fishing master's team.

A5: In the wild, Japanese cormorants live for an average of seven or eight years. Captive cormorants used for fishing, however, usually live for between 15 and 20 years and sometimes for as long as 25 or 30. Within that lifespan, the birds typically work

between 12 and 15 years.

A6: Wild cormorants live in colonies. While migrating, feeding, and nesting together, they learn by watching and imitating older birds. This sociability and adaptivity make them an excellent species for fishing, as newly captured birds readily adjust to life with humans and learn their new trade from the other cormorants.