Colour ringing cormorants in Poland - Szymon Bzoma

Katy Rybackie colony, Poland, Pomorskie 54°21'N 19°14'E

Over 70 ha of pine forest *Pinus sylvestris* covered by several subcolonies with about 9,000 nests of *Phalacrocorax carbo* and 1,000 of *Ardea cinerea*.

Located on Vistula Spit (Southern Baltic coast) between the Gulf of Gdansk and the Vistula Lagoon (main feeding grounds).

Colour ringing with green rings and white letters since 2001 (17 birds, NZA - NZZ) to 2002 (22 birds, RAA-RBH, RBN, REC).

Cormorants' training of hunting - Robert Gwiazda

Young predators often learn themselves hunting techniques and train them by playing. This behaviour is well known for mammals or for raptors but not often observed for water birds. On 2 July 2002 about noon, ca. 100 cormorants were observed in backwaters of the Dobczyce dam reservoir in southern Poland. In autumn 2002 this eutrophic reservoir was ca. 800 ha of area and ca. 10 m of depth. Cormorant occurred at the reservoir all year except for the period with ice cover, but did not breed there. Inside the group of cormorants which were resting on muddy island and swimming around, one young bird was "playing" with a small stiff, yellow, probably plastic tube ca. 10-15 cm long and diameter ca. 1-2 cm. This bird was swimming and handling this tube, then threw it into the water and pull out it dipping the head and neck. That observation lasted about 5 minutes and was carried out from the distance ca. 50 m by scope KOWA 40-60x60. Similar behaviour was observed at the same place on 22 August and on 17 September 2002. One young cormorant from the group of more than 200 individuals was "playing" with the flat piece of black limp material (textile or thin gum), ca. 7-10 cm long. The bird was slowly swimming and keeping the piece into bill. Time after time the cormorant flung up the material into the water, then dived to keep it out. The observations lasted some minutes.

Probably young cormorants can train catching and handling fish. This situation was earlier rarely observed for cormorants outside the breeding colonies where it is well known. It was interesting that birds used small pieces of anthropogenic materials to train.

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