# The Pied Avocet – a "lost" breeding season?\*

DE: Säbelschnäbler DK: Klyde SE: Skärfläcka

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The Pied Avocet Recurvirostra avosetta is an indicator species in one of the reference sites (Vellinge, SW Sweden) within EU's LIFE—project BaltCoast. The breeding colony on the islet of Landgren's holme in Skanör suffered heavy losses of eggs and chicks in 2009. Temporary loss of power in the electric fence surrounding the breeding area enabled foxes to predate on the colony. Birds breeding outside the area with stable water level suffered heavy losses due to floods. Reinforcement and improvement of the fence will be carried out before the breeding starts in 2010.

The breeding population of the Pied Avocet *Recurvirostra avosetta* in Sweden is quite vulnerable. It has been estimated that fewer than 1,500 pairs attempt to breed every year. Thus it is regarded as an endangered species and is put in the Red List Category NT (Near Threatened) in The 2000 Red List of Swedish Species (Gärdenfors 2000). Furthermore it is included in Annex 1 of the EU Bird Directive.

One third of the Swedish population is estimated to breed in Vellinge. The number of breeding pairs of the Pied Avocet colony on the islet of Landgren's holme in the Flommen nature reserve (Skanör) has been recorded since 1988. In the very first six years the breeding was sporadic. Just a few pairs occurred on stage (Figure 1) and the reproduction was very low. Since 1994, when all ligneous vegetation was removed from the islet, the annual number of breeding attemps has gradually increased. The number of pairs has varied from year to year as well as the breeding success as described by Walinder & Karlsson (2003, 2004) and Bentz et al. (2007, 2008). In the last decade on average more than 80 pairs have attempted to breed every year.



Adult Pied Avocets over the islet Landgren's holme. Photo: Jens B Bruun.

<sup>\*</sup>Report no 255 from Falsterbo Bird Observatory

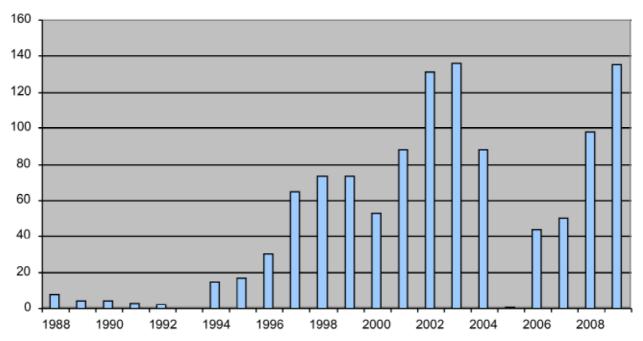


Figure 1. Number of Pied Avocet pairs attempting to breed in the Flommen nature reserve in the period 1988–2009.

## **Breeding attempts in 2009**

In 2008 the Pied Avocets had very good reproduction results on Landgren's holme in Skanör. It has been estimated that more than 100 chicks reached fully-fledged stage. It was proved that measures taken (electric fence and adjustable dam) were successful (Bentz et al. 2008).

The expectations in 2009 were high. The first Pied Avocets were seen at the breeding site on Landgren's holme as early as March 14th. On March 28th 134 birds were present and courtship had started (Table 1). The number of Pied Avocets gradually increased. On April 15th when the first birds were seen incubating 272 individuals were recorded on the islet, many of them still courting and displaying.

Three days later there was a power cut in the electric fence, triggered when the barbed wire got in contact with one of the live wires. The fox took advantage of this power failure during night, passed the fence, swam to the

Date	No of Birds	Comments
March 28	134	Arrival and courtship initiated
March 30	144	
April 1	194	
April 4	200	
April 5	216	
April 8	243	
April 9	256	
April 11	263	
April 15	272	Incubating birds, courtship and display
April 18		Electric failure of fence due to contact with barbed wire, fox predation
April 19	100	Probably "late" breeders without clutches before fox predation
April 20	144	Returning of some breeders after fox predation
April 26		Electric failure of fence due to contact with barbed wire
May 10	75	Sporadic breeding efforts spoiled by Corvids
May 14	24	Breeding outside the dammed area
May 15	0	Area flooded
June 3	122	Sporadic visit without breeding
June 6	134	No breeding attempts
June 15	186	A few breeding attempts
June late		4 fledged chicks

Table 1. Number of Pied Avocets on Landgren's holme and in the surrounding area in 2009.



Figure 2. Unhatched Avocet egg with embryo and yolk. Photo: P-G Bentz/Sturnus.

islet and provided itself with Avocet eggs. Next morning the Avocets were widely spread and seemed restless. Most of the nests were empty, single eggs were spread out over the area and just a few birds were still incubating. Footprints of probably two foxes were found in the mud. Analysis of some damaged eggs showed that they contained a few days old embryos (Figure 2).

The next day about 100 Avocets were still in the area (Table 1) and the following days the number of birds gradually increased to 144.

On April 26th the power was cut once more, due to careless people and a free-running dog. The Avocets were dispersed. In the next two weeks Corvids predated on the nests that were left.

On May 14th six pairs were found breeding outside the dammed area, but still in the fenced pasture. Next day the area was flooded and the nests destroyed.

Many Avocets stayed in the surroundings and on June 15th 186 birds were recorded. A few of these were incubating. At the end of June four fledged chicks were seen.

## A "lost" breeding season?

In 2009 breeding attempts were made by 135 Pied Avocet pairs on and around Landgren's holme in Skanör. The final outcome was four fledged chicks. This is bad reproduction result



Adult Pied Avocet with chick in Skanör. Photo: P-G Bentz/Sturnus.

but it is still not a "lost" breeding season. It was clearly shown that the Landgren's holme is a favoured reproduction site for the local Pied Avocet population since no less than four relaying attempts were confirmed.

The Pied Avocet can get very old and the oldest known bird reached the age of 24 years 6 months (Rydzewski 1978). Thus there are several chances for adult and fertile birds to reproduce in years to come.

### Improvements to be made

The electric fence erected in 2009 proved to be insufficient. It stretched over 4 km, had two wires, 15–20 cm and 40–60 cm above the ground, and were connected to one power source. Thus a short circuit will cut the power in both wires.

Improvements made before the next breeding season are an additional electric wire on top (120 cm above the ground) and two seperate power sources, one for the lowest wire and one for the two on the top. In between the electric wires run barbed wires as an additional measure to prevent four-legged predators to enter the Pied Avocets' breeding area in Skanör.

The improvements are supported by LIFE–BaltCoast, Vellinge municipality, Falsterbo Bird Observatory, The Administrative Board of Skåne County, Swedish Forest Agency and the local cattle keeper Lars Persson.



Adult Pied Avocet from the breeding colony on Landgren's holme. Photo: P-G Bentz/Sturnus.

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