

The Pied Avocet – unexpected problems*

DE: Säbelschnäbler

DK: Klyde

SE: Skärfläcka

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The largest Pied Avocet *Recurvirostra avosetta* colony in Sweden is located on the islet of Landgrens holme in Skanör (Vellinge, SW Sweden). It is one of the reference sites within EU's LIFE-project BaltCoast.

The electric fence surrounding the breeding colony of Pied Avocets was reinforced and improved before the breeding started in 2010. The temporary loss of power which enabled foxes to predate on eggs and chicks in 2009 should not be repeated. Though appropriate measures were taken unexpected problems occurred: cattle.

Though it is no longer included in The 2010 Red List of Swedish Species (Gärdenfors 2010) the Pied Avocet *Recurvirostra avosetta* is vulnerable and included in Annex 1 of the EU Bird Directive.

One third of the total Swedish population is estimated to breed in Vellinge. The Avocet colony on the islet of Landgrens holme has been recorded since 1988. It was not until the ligneous vegetation was removed from the islet in 1994 that the annual number of breeding

pairs gradually started to increase. The number of breeding attempts and the reproduction success has varied from year to year (Figure 1) as described by Walinder & Karlsson (2003, 2004) and Bentz et al. (2007, 2008, 2009).

Early arrival but late breeding

In 2009 breeding proceeded according to expectations. The first Avocets arrived at the breeding site as early as March 14th and four weeks later 135 incubating birds were seen.



Landgrens holme. Photo: P-G Bentz/Sturnus.

* Report no 260 from Falsterbo Bird Observatory

In April fox predation took place due to two consecutive electric failures. Later in April some sporadic breeding efforts were spoiled by Corvids. Only four fledged chicks were found (Bentz et al. 2009).

The electric fence was reinforced and improved in late winter 2010 and the first Avocets were seen in the breeding area on March 21st. The number gradually increased till April 4th when 350 birds were observed on the islet of Landgrens holme. No breeding behaviour was recorded. During the following three weeks the daily number of birds varied from 250 to 300. In the mornings they were seen displaying and searching for suitable spots where to place their nests, but later in the day most of the birds temporarily left the area.

The electric fence was regularly checked and apparently functional as footprints of foxes and badgers were found only *outside* the fenced area.

Usually the Pied Avocets in the colony have a concentrated egg-laying period from April 21st until April 25th. In the spring of 2010 egg-laying was delayed, probably due to the long and cold winter and low water temperatures.



The breeding area is clearly marked. Photo: P-G Bentz/Sturnus.

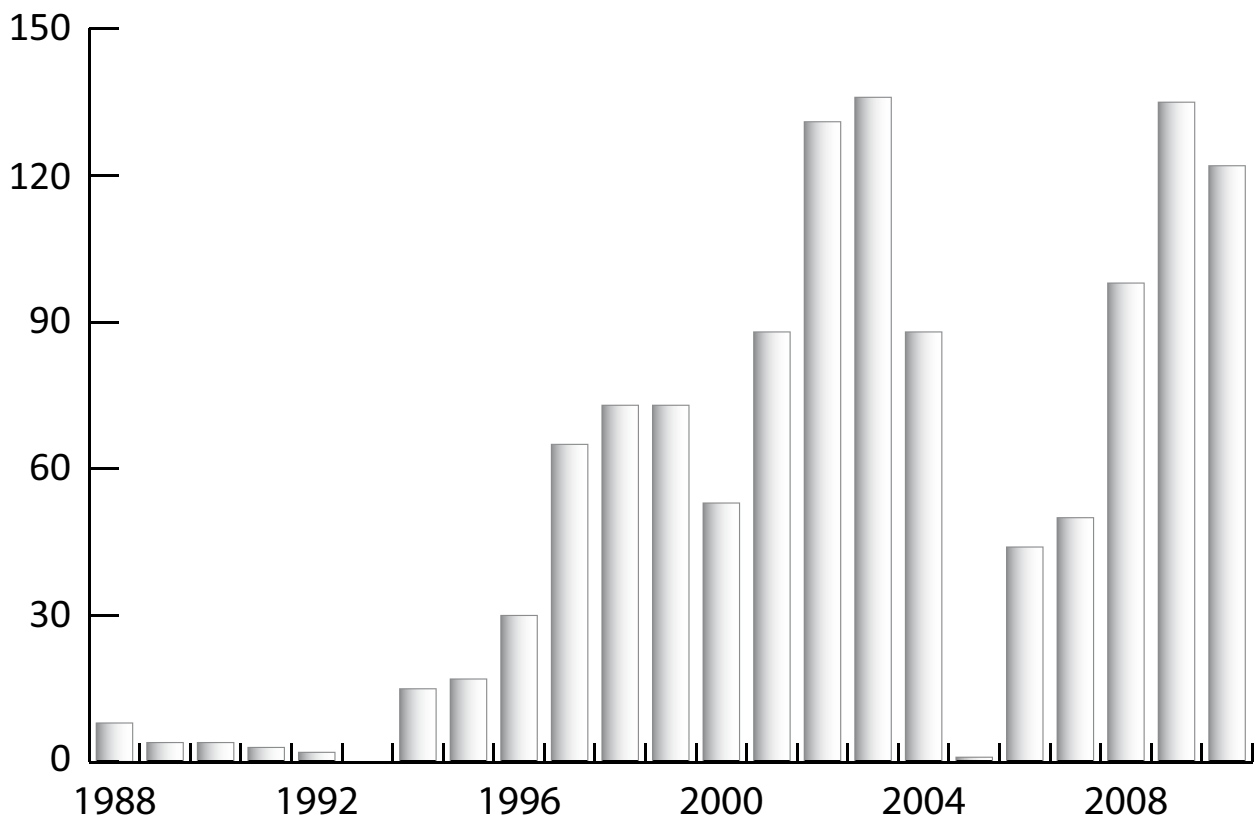


Figure 1. Number of Pied Avocet pairs attempting to breed in the Flommen nature reserve in the period 1988–2010.

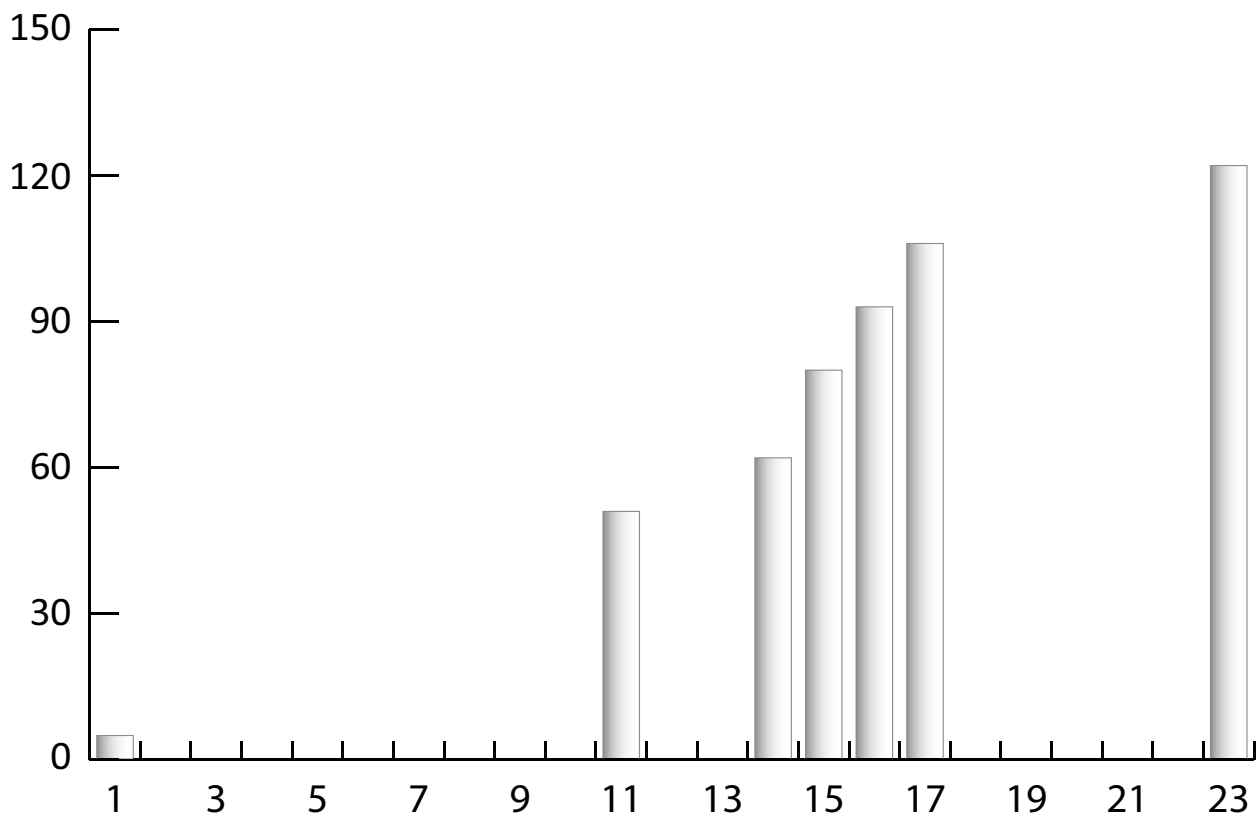


Figure 2. Number of incubating Pied Avocets on Landgren's holme in May 2010. Counts were made in seven days.

On April 25th the number of Avocets on the islet was reduced to about 100. Apparently the birds had spread over the Falsterbo peninsula as 25 of them were seen in an adjacent area just

outside the fencing, another 25 in the Ängsnäset lagoon area, while others probably had moved to a potential breeding site about 12 kms away in the Foteviken area.



Proud mother with offspring at Landgrens holme in 2010. Photo: P-G Bentz/Sturnus.



Figure 3. A lift was used to study the Pied Avocets' family life at Landgrens holme in 2010. *Photo: P-G Bentz/Sturnus.*

Three days later 154 Avocets were seen on the breeding islet. Then the number slowly but surely increased further.

Incubating birds

The first incubating birds were seen on May 1st. The number gradually increased and reached its peak on May 23rd when 122 birds were seen incubating (Figure 2). Apparently the egg-laying period was more prolonged than in previous years (see above). A lift was used to count the number of breeding birds and to film the Avocets' family life (Figure 3).

Compared to previous years the nests were extremely concentrated to the higher parts of the breeding islet, i.e. the central ridge. The reason for this is probably to be found in the fact that the lower parts were very wet due to some intense rainstorms around the turn of the month April/May. This concentration of nests would turn out to be devastating for the breeding success. A high concentration of incubating birds has proved to be a good collective defense when it comes to Corvid predators. But another incident was to influence the breeding in an unfavourable way.

Resting cattle

On May 22nd 25 cattle were released within the fenced area. They normally behave in a very calm way as they had been in another pasture for some weeks in advance in order to adapt to outdoor life after a long winter in the stable. Grazing cattle in the salt meadows have proved to reduce the disturbance from humans and the trampling of nests have never before proved to be a significant negative factor to breeding success.

Incubation progressed, no predation from Corvids or mammals was registered and on May 29th the first two newly hatched chicks were seen.

Many other bird species took advantage of the Avocets' collective colony defense and Redshanks, Lapwings, Oystercatchers, Arctic Terns and Little Terns were breeding on the islet as well.

On June 5th ten Avocet clutches were seen. On the same day the cattle herd crossed the shallow water and landed on the breeding islet attracted by the fresh grass and the cooling wind. They were grazing for hours and no extensive trampling in nests occurred. This

season's catastrophe happened when the herd stayed overnight on the islet. At dawn the ruminating cattle were found laying down on the ridge with the high concentration of nests. About 50 per cent of the nests were destroyed on this occasion and many of the rest were ruined the following afternoon when the herd returned to the islet. The few remaining egg clutches became accessible food to flocks of Jackdaws which seized the opportunity when the collective defense was more or less erased.

Persistent ambition

In spite of last season's unexpected failure, the ambitions to create optimal breeding conditions for the local breeding population of Pied Avocet at Landgrens holme in Vellinge remain. As adapted grazing from cattle is the most important condition for successful breeding, temporary fencing around the islet during the Avocets' incubation period might be the "final solution".

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