

Windfarm to replace a rare breeding colony

April 2006

The inhabitants of Penong, South Australia, are said to be considering the fencing in and farming of a rare breeding colony of the Australian Windmill (*Aerogyra australiensis*). There are also rumours that a local windfarm may be set up near Hamilton, using stock purchased from the Penong farm.

This has raised concern in environmental circles as, although the species is currently widespread, Penong is its only known breeding colony. An environmental spokesman said "It is disgraceful that a small group of people should be allowed to trap and exploit this icon of the Australian landscape for their own selfish profit".

The colony has been present on the outskirts of Penong for many years now. It makes use of a shallow aquifer which supplies its water needs. The accompanying photo of the colony shows mainly adult windmills, but you can see a smaller juvenile on the right with its head just rising above the horizon. One occasionally sees mated pairs of windmills elsewhere, for example along the Coorong and at Lake Bolac, or one may find an aging adult accompanied by a young mill, but a large colony such as this is a unique situation.

The seldom-seen juveniles are particularly interesting as they are a mobile form, in contrast to the sessile adult which most of us are familiar with. This is necessary for dispersal of the species and colonisation of fresh aquifers. The juveniles have wheels (see second photo) and after weaning they move across the country testing the ground at intervals until they find a satisfactory source of water. They then drill down with their proboscis to the water bed, shed their wheels and settle down to a sedentary state.

The juveniles appear to move mostly at night. There is a story of a patron of the Penong Pub who had an accident on his way home one night: The patron claimed "I was driving along the road about 11:00 pm when this small windmill suddenly raced in front of me – forcing me to veer off the road and into a ditch!". Police are investigating the incident.

Once the juvenile mills are settled, they can live quite long lives, some individuals are reported to be over a hundred years old. Breeding rates are, however, quite low, and numbers are declining.

Windmills are susceptible to disturbance, pollution of aquifers, or competition from introduced petrol-driven pumps. There is also a worry that they might hybridise with the exotic giant mill (*A. electrogeneris*) which has recently established feral colonies in several parts of our region, e.g. Codrington.

Photos (below):

Windmills 1 – One of the few known breeding colonies of Australian Windmills (*Aerogyra australiensis*) at Penong, SA.

Windmill 2 – A rarely-seen juvenile windmill. This is the mobile form that disperses prior to the sedentary adult state – note wheels for locomotion.

Postscript:

A week later, the following appeared in the Letters column of *The Spectator* (11-4-2006, p.4)

Well Done Hamilton Spectator people. Passing through last Friday, I grabbed several local papers that I don't usually get to read, and was absolutely delighted to read your Nature Notes. It's wonderful to see someone, in this era of homogenised media output, is retaining an old-fashioned custom and doing so with such wit and panache. Loved the photos, loved the whole thing, still grinning idiotically everytime I think about it. Congratulations to both the author and yourselves.
Dianne Ward, Nelson.

