ORANGE-BELLIED PARROTS FEEDING ON A CULTIVATED CROP

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In the late afternoon of 14 July 1981 I was asked by Mr. K. C. Burzacott to verify the presence of Orange-bellied Parrots Neophema chrysogaster on his property at Mulgundawa (35°19'S, 139°11'E). Numerous Neophema parrots were frequenting two small paddocks of Sunflower Helianthus annuus stubble which were being ploughed. The birds had been present there for several weeks. On reaching the property, I identified one N. chrysogaster, though I suspected the presence of others. I based identification on the bright green colour of the back and the pale whitish loral region. Mr. Burzacott agreed to postpone further ploughing thereby enabling us to search the area on 19 July.

Ploughing had reduced the original area of stubble by about half and Mr. Burzacott considered that the number of parrots had decreased commensurately. We estimated that about 300 were still present, Blue-winged Parrots N. chrysostoma slightly outnumbering Elegant Parrots N. elegans. Precise counting was impossible because the birds were not visible while they feed at ground level. Only when large numbers were flushed and then alighted on sunflower stalks for a short time before dropping down to fed was there any opportunity for effective scanning. Six N. chrysogaster was the maximum number visible at one time, almost half the flock being in view on that occasion. When the birds were in flight, we were unable to locate N. chrysogaster easily enough to have any hope of making a satisfactory aerial count. Following total ploughing of the paddocks the next day, all Neophema parrots departed.

Although it was impossible to actually see the birds eating sunflower seed there was much evidence that this was their main food. During harvesting operations, numerous sunflower heads had been cut off but had fallen to the ground intact. These had been "raided", the shells of opened seeds lying in a ring around each head. Heads lying face down had only the outer edges eaten. Unfilled seeds had not been removed from

the head. The above occurrence was the first time that the species had been found feeding on a cultivated crop.

Previous records of *N. chrysogaster* in South Australia had come mainly from relatively unmodified coastal habitat (Jarman 1965). Although not far from water, these birds were actually some 40 km from the nearest sea coast.

The opportunity to see whether this feeding habit would be repeated came on 4 June 1983 when, with W. R. Wheeler, I visited a small area of unreaped sunflower near Tolderol Game Reserve. Over 100 Neophema parrots were present. Elegant Parrots slightly outnumbering Blue-winged Parrots. Amongst them were at least three Orange-bellied Parrots. On this occasion, all three species were definitely seen to take and eat seed from the sunflower heads. As more sunflower ripened, numbers of Neophema parrots increased until at least 600 were present in late June. (On 25 June, one Rock Parrot N. petrophila, identified by its browner colour and blue lores, was seen, in addition to the other three species in the area that day.) The greatest number of N. chrysogaster seen on one day was eight on 30 July but a complete count was never attempted because this would have meant undue disturbance to the birds. Weekly monitoring showed some N. chrysogaster to be present there on most occasions until 8 September 1983.

This repeated activity of 1983 indicated that it may be possible to provide winter food for Orange-bellied Parrots by growing sunflower for them. (It is a well-known livestock management technique that provision of supplementary food at annual occurring times of great food scarcity enables flock numbers to be substantially increased.) Strong opposition to such a proposal was expressed by some members of the S.A. National Parks and Wildlife Service and the South Australian Ornithological Association but local naturalists gave support, enabling me to sow a trial plot of three hectares on my nearby property for the winter of 1985. These sunflowers

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began to ripen in mid-April and almost immediately were visited by a few Elegant Parrots. By May about 70 parrots were present, the majority being Blue-winged Parrots. By June numbers had risen to about 300 and no substantial increase was noted thereafter, possibly due to the small size of the patch. On 15 June the plot was visited with Shane Parker, Curator of Birds, S.A. Museum, and at least seven N. chrysogaster were found to be present. The species was probably a daily visitor thereafter until 21 August although numbers gradually dwindled to three by late July and only one by mid-August.

The sunflower grown on the plot was virtually exhausted by the end of June and subsequently the *Neophema* population was maintained by purchased sunflower seed scattered by hand daily. Half a hectare of white millet was sown at one end of the sunflowers to test whether this, one of the staple foods of *Neophemas* in aviculture, would be preferred to sunflower. No interest was shown in millet while sunflower was plentiful but it was used extensively after June when sunflower supply had become reduced. Millet was not actually seen to be eaten by *N. chrysogaster* but

they were seen close to it several times suggesting that it was eaten on occasions.

Thus there is no doubt that *N. chrysogaster* will utilise sunflower for winter food if it can be suitably provided for them. It is regrettable that there has been such strong official opposition to this adaptation of a basic farming principle which potentially could increase the numbers of one of Australia's most endangered species.

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REFERENCE

Jarman, H. 1965. The Orange-breasted Parrot. Aust. Bird Watcher 2: 155-67.

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