Sequential polygamy of Kentish Plover Charadrius alexandrius

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The mating system of Kentish Plover *Charadrius alexandrinus* is variable (Cramp & Simmons 1983). Typically the birds are reported as monogamous (Rittinghaus 1961; Johnsgard 1981), but polyandry and simultaneous polygyny also occur (Cramp & Simmons 1983). Lessells (1984) found that when chicks have hatched, one sex - usually the female - deserts the brood. Renesting by a female with a new male proved sequential polyandry. However, in some other species the male deserts instead of female, giving him the opportunity for sequential polygyny, but this kind of mating system has not yet been definitely reported for the Kentish Plover (Cramp & Simmons 1983), although Warriner & Warriner (1978) observed both simultaneous and sequential polygyny of the Snowy Plover . *C.alexandrinus nivosus.*

On 7-9 April, 1989, a pair of Kentish Plovers nested on an alkaline grassland called Makraszek in South Hungary. The pair hatched all three eggs on 30 April, and for 5-7 days both parents cared for the young. However, afterwards the male became less active in parental care, and he left the breeding ground 13 days after the hatch date. He was observed again 8-9 days later courting a new female. The new habitat was also an alkaline grassland, and the distance between the first and second site was 10 km. The new pair laid three eggs, but shortly afterwards they deserted and were not observed again.

Kentish Plover chicks are precocial, being able to feed for themselves within hours of hatching. The chicks need to be protected from predators, shown food and brooded, but this is still less care than needed by altrical chicks. This may provide the chance for one sex to desert, and to increase its own fitness by finding a new mate. But which sex will desert? Two factors may affect the outcome of selection for desertion. The first is the capability of each sex as a parent. From this point of view, the sex which is better at parental care, (that is the sex which ultimately leads to the higher fledging rate), should stay with chicks. The other factor is the availability of partners for the deserting parent. This will depend on whether the overall sex ratio of the population is biased. In this respect we would expect the sex to stay which has the lower chance of remating. To evaluate these hypotheses one should measure the contribution of parents to the survival of chick, the sex ratio in the population and the time needed to find a new partner.

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