

PEREGRINE PRAIRIE FALCON INTERACTION

by

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Peregrine Falcons (*Falco peregrinus*) are normally involved in courtship and nest-site selection during February in much of California. On 3 February 1975, at 1400 PST in Sonoma County, California, I observed an agonistic interaction between a resident pair of adult Peregrines and an intruding competitor for prey and nest-territories, an adult female Prairie Falcon (*Falco mexicanus*). The interaction occurred above an east-west aligned canyon at an elevation of 670 meters. All observations were made through binoculars from the southern ridge of the canyon at distances of 300 to 500 meters. Rain fell intermittently, and snow persisted on higher ridges. I have no reason to suspect that my presence had any effect on the falcon behavior. In this area Peregrines have nested from 1969 to 1975 (Thelander 1975) while Prairies are rarely observed and are not known to breed. In 1974, I observed three immature and two adult Peregrines on the northern ridge of the canyon.

The interaction between a female Peregrine and a female Prairie had begun when I arrived. The female Peregrine repeatedly circled to gain height advantage and then made shallow stoops at the Prairie which rolled onto its back with legs extended to defend itself. Contact occurred only when the Prairie grappled from below with the circling Peregrine. Vocalizations occurred throughout the interaction, notably wailing screams during contact. Physical contact between the falcons occurred four times in seventeen minutes of observation. The female Peregrine pursued the Prairie eastward after each contact. Each time the Peregrine returned first, followed within minutes by the Prairie. Neither falcon appeared to have an advantage in flight capabilities. As the Prairie returned a fifth time and approached the female Peregrine, a previously undetected male Peregrine stooped with wings closed from above and struck the Prairie, which did not react quickly enough to roll and defend itself. The Prairie fell immediately, atypically heavily inert, with no sign of life, approximately 215 meters into the canyon below. The male Peregrine soared briefly over the area in which the Prairie fell, and then flew northward out of view. The female Peregrine landed, visibly exhausted, in a tree on the northern ridge. In deference to the female Peregrine, no attempt was made to recover the dead or injured Prairie (difficult terrain and access necessitated disturbance of the Peregrines to recover the Prairie).

Several authors describe interspecific agonistic interactions between Peregrines and such species as Prairie Falcons, Gyrfalcons (*Falco rusticolus*), Lanner Falcons (*Falco biarmicus*), Saker Falcons (*Falco cherrug*), Ravens (*Corvus corax*), Golden Eagles (*Aquila chrysaetos*), and Bald Eagles (*Haliaeetus leucocephalus*) (Cade 1960, Ratcliffe 1962, Nelson 1969, Nelson 1970, von Blotzheim 1971, Porter and White 1973). Cade (1960) mentions that the basic components of agonistic behavior displayed by Peregrines are stereotyped patterns. These authors attribute variation in the intensity of this behavior to (1) individual variation, (2) the proximity of the interaction to the

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nest-site, (3) the frequency of interactions between the species involved, and (4) the period of the annual cycle when the interaction occurs. Rarely has the agonistic behavior been reported to be intense enough to cause death or injury to the individuals involved. The exceptional combination of these factors—(1) an exceptionally aggressive and effective male Peregrine, (2) closeness to the Peregrine nest-site, (3) the scarcity of Prairies in the area of the Peregrine nest-site, and (4) the timing of the Peregrine nesting cycle, nest-site selection—apparently resulted in such an occurrence on this occasion.

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