

turned on at 4:00 a.m. and off at 8:00 a.m. such that the total length of day was near fourteen hours. Artificial light was added by means of two 150 watt outdoor spotlights mounted within 3½ feet of the two straw bales used for perches. Hence there was no way in which the birds could avoid the light. The size of the breeding room in this case is 6 by 8 by 8 feet high.

At the time that the photoperiod was increased in the fall, neither bird showed obvious sexual behavior. Within two weeks both birds were clucking a good deal and a scrape, which had been intermittently present during late summer and early fall, was now regularly attended. At this writing (20 November) both birds appear to be in full breeding condition, and grease marks have been seen on the back of the female, suggesting that copulation has taken place. The abdomen of the female appears slightly distended.

A few general comments perhaps are in order. First, success in this case was achieved with a pair of birds that appear to be very well adjusted to each other and very tame in regard to people. Secondly, it does not appear—at least in this case—that intense light is necessary. The breeding cage in New York was fairly dark, with light below that necessary to take color photographs without a flash. The presence of other birds tethered about on blocks did not seem to disturb the nesting pair. It appears to be a mistake to try to aid the hatching chick; the result can well be hemorrhaging. Prairie Falcon eggs do not appear to develop well in incubators designed for hens eggs. I did place a thermistor in a dummy egg and place it under the incubating female falcon. At no time did the temperature exceed 95° F. in the center of the egg, although the tests were of too short duration to be conclusive. Young prairie falcon chicks can be reared by hand, although it is a task of inordinate demand. Finally, a pair known to be capable of successful breeding can be brought into full reproductive condition in the fall by the manipulation of photoperiod. Whether or not eggs can be produced from such a situation remains to be seen.

Addendum.—The following comments regard the outcome of the attempted induction of fall breeding in the above pair of prairie falcons. By 2 December 1970, the abdomen of the female had not become significantly distended, and the birds were returned to natural photoperiod. Despite the fact that both birds reached full behavioral condition in the six weeks between mid-October and the first of December, neither bird began a molt nor did the female become clearly gravid with eggs.