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Snowfall causes lek movement in the Sharp-tailed Grouse.—The Sharp-tailed Grouse (*Tympanachus phasianellus*) exhibits what has been termed "classical" lekking behavior. Males of classical lekking species occupy the same territory on the lek within and between years (Hohn 1953, Hamerstrom and Hamerstrom 1955, Koivisto 1965, Evans 1969). Although there are minor variations in boundary locations, the territories on leks are quite stable, which suggests that suitable landmarks must exist to provide cues for the lekking males (Evans 1969). This paper reports on the movement of Sharp-tailed Grouse leks within and between days due to unusual environmental circumstances.

The study sites consisted of areas of muskeg located in the James Bay region of northern Ontario, Canada. All observations were made during the morning "dancing" period. On 31 March 1990, a nucleus of nine birds arrived and began "dancing." Males that arrived later occupied territories peripheral to those of the individuals that arrived earlier. In this way, the late-arriving males made the early-arriving birds "central." At the end of the morning display period, there were twenty-two males displaying on this lek. On 1 April 1990, the lek formed in a similar fashion to that seen the previous day; however, the center of the lek had moved approximately 30.5 m from the position noted a day earlier. The area of muskeg that was the central region of the lek the day before was now flooded by water and was no longer suitable for "dancing."

Between 27–29 March 1991, a storm deposited 0.3–0.9 m of snow on the James Bay muskeg. On 30 March 1991, a nucleus of four birds arrived and began displaying. Eight other males arrived and established territories on the periphery of the original nucleus of birds. The lek was disturbed twice with the group members fleeing and then returning to establish the lek in a manner similar to that described above. That is, a nucleus of four birds arrived first and the late-arriving birds formed peripheral territories around these "central" males. However, although the lek was established in a similar fashion, three times in one morning, the position of the lek was in a different location each time.

The observations made on the two leks as described above suggest that stability of territories on leks can be affected by unusual environmental circumstances. In one case, flooding caused the lek to move 30.5 m from its location noted the previous day, and in the other, a snowstorm covered existing landmarks on the muskeg with the lek forming and reforming in three different locations in the same morning. Although the location of the lek changed in these two cases, the actual infrastructure of the lek appeared unchanged. In other words, individuals in the lek maintained their positions relative to one another. It is assumed that the nucleus of individuals that first started displaying were the same between mornings in 1990 and within the morning period in 1991. This assumption appears valid since the process whereby the infrastructure of the lek is established by central males that arrive first with peripheral individuals arriving later has been documented for other lekking grouse (e.g., Wiley 1973, Hartzler 1974). The above observations are suggestive that habitat landmarks may not be the only important cue used in maintaining the stability of territories in a "classical" lek; individuals may use their neighbors as "landmarks" on which to orient themselves.

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Colonial nesting of the Orange Oriole.—The Orange Oriole (*Icterus auratus*) is endemic to the Yucatán Peninsula, México, but, despite being fairly common, little is known of its breeding biology. Only one set of eggs is reported in North American collections (Kiff and Hough, 1985. Inventory of Bird Egg Collections in North America, 1985. A.O.U. and Oklahoma Biol. Survey, Norman, Oklahoma) and the nest has not previously been described. Since 1974, de Montes has found numerous Orange Oriole nests in the states of Yucatán and Quintana Roo. Field observations indicate that the nest is a neat pouch constructed of plant fibers, varying in color from blackish to straw, depending on the predominant materials used. In general appearance it resembles the nest of Hooded Oriole (*I. cucullatus*) but tends to be slightly deeper. While visiting the Western Foundation of Vertebrate Zoology (WFVZ) recently, Webb found an uncatalogued, but labeled, Orange Oriole nest from "Yucatan," which allows a fuller description to be provided. The WFVZ nest is approximately 12.5 cm deep by 7.5 cm in diameter. It is woven of fine blackish plant fibers and in places is so thin that light passes readily through the walls. Typically *I. auratus* nests are slung between slender branches, often near the top of a tree or bush, at heights of 1–10 m above the ground. They thus tend to be conspicuous, in contrast to *I. cucullatus* nests which, in the Yucatán Peninsula, are slung under large leaves such as those of palms. Most Orange Oriole nests have been near or over water, e.g., around cenotes (natural limestone sinkholes) or in low flooded areas. Prior to 1988, de Montes had occasionally found two to three nests in close association.

On 4 July 1988, we located two Orange Oriole colonies in Si'an Kaan Biosphere Reserve, Quintana Roo. At the Caseta Chumpón entrance, we found 30–35 nests in an area of 80 × 30 m, with up to five nests in a single small tree. Nests were placed 2.5–9 m up in bushes and low trees in flooded scrubby woodland. Breeding was not synchronous, as some adults were still building nests, some were sitting in completed nests, others were feeding nest-bound young, and at least one stub-tailed juvenile was out of the nest, begging for food. Associated with the colony were two pairs of Hooded Orioles, a pair of nest-building Black-cowled Orioles (*I. dominicensis*), and at least three pairs of Black Catbirds (*Melanoptila glabrirostris*) that were feeding nestlings.

At Km 16.0 along the Chumpón access road, we located a colony of 26–30 pairs of Orange Orioles in an area of 60 × 25 m. Nests were placed 1–3 m up in flooded low scrub. All of the nests appeared to be completed and most, if not all, contained sitting adults. No other nesting species appeared to be associated with this second colony.