

FEATURE ARTICLES

GYRFALCON DIET IN CENTRAL WEST GREENLAND DURING THE NESTING PERIOD

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Abstract. We studied food habits of Gyrfalcons (*Falco rusticolus*) nesting in central west Greenland in 2000 and 2001 using three sources of data: time-lapse video (3 nests), prey remains (22 nests), and regurgitated pellets (19 nests). These sources provided different information describing the diet during the nesting period. Gyrfalcons relied heavily on Rock Ptarmigan (*Lagopus mutus*) and arctic hares (*Lepus arcticus*). Combined, these species contributed 79–91% of the total diet, depending on the data used. Passerines were the third most important group. Prey less common in the diet included waterfowl, arctic fox pups (*Alopex lagopus*), shorebirds, gulls, alcids, and falcons. All Rock Ptarmigan were adults, and all but one arctic hare were young of the year. Most passerines were fledglings. We observed two diet shifts, first from a preponderance of ptarmigan to hares in mid-June, and second to passerines in late June. The video-monitored Gyrfalcons consumed 94–110 kg of food per nest during the nestling period, higher than previously estimated. Using a combination of video, prey remains, and pellets was important to accurately document Gyrfalcon diet, and we strongly recommend using time-lapse video in future diet studies to identify biases in prey remains and pellet data.

Key words: camera, diet, *Falco rusticolus*, food habits, Greenland, Gyrfalcon, time-lapse video.