TABLE 1. Frequency of food brought to nests 2, 5, and 10.

	N		%
NEST 2			
Pink Salmon (*Onchorhynchus gorbuscha*)	9		27.3
Herring (*Clupea* sp.)	3		9.1
Dolly Varden (*Salvelinus malma*) or Cutthroat Trout (*Salmo clarki*)	3		9.1
Halibut (*Hippoglossus stenolepis*)	1		3.0
Sculpin	1		3.0
Unidentified salmon	3		9.1
Unidentified fish	8		24.2
Kelp Crab (*Pugettia producta*)	3		9.1
Unidentified crustacean	1		3.0
Gull (*Larus* sp.)	1		3.0
Total fish		28	84.8
TOTAL	33		
NEST 5			
Pink Salmon (*Onchorhynchus gorbuscha*)	4		10.8
Herring (*Clupea* sp.)	10		27.1
Unidentified fish	12		32.4
Kelp Crab (*Pugettia producta*)	1		2.7
Rodent	1		2.7
Unidentified animals	7		18.9
Dolly Varden (*Salvelinus malma*) or Cutthroat Trout (*Salmo clarki*)	1		2.7
Sculpin	1		2.7
Total fish		28	77.7
TOTAL	37		
NEST 10			
Pink Salmon (*Onchorhynchus gorbuscha*)	5		10.9
Herring (*Clupea* sp.)	23		50.0
Unidentified fish	7		15.2
Rodent	2		4.3
Unidentified animals	8		17.4
Sea Urchin	1		2.1
Total fish		35	76.1
TOTAL	46		

TABLE 2. Frequency of visits to nest 2 by adults.

	Male	Female	Total
Without food or nesting material	59	112	171
With food	21 ± 1	17	37 ± 1
With nesting material	9	11 ± 1	21 ± 1
Total	89 ± 1	140 ± 1	229 ± 2

Crabs and other intertidal animals were taken from tide pools when tides were favorable. Gulls (*Larus* sp.) occasionally were chased by the big raptors. Only once was a gull recorded as food in the nest of an eagle.

Bald Eagles can take trout and salmon by diving completely into the water. On occasion, a fish is too heavy for an eagle and a struggle ensues in the water. An eagle can use its wings as paddles enabling it to "row" ashore. This was seen near nest 2. A seal chased a salmon to the surface and lost it when an eagle from nest 2 flew down and grasped the fish with its talons. The eagle rowed ashore with the salmon trailing behind, fast in its talons. The seal followed behind, but left before it could witness the loss of the fish to another intruding eagle.

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OBSERVATIONS ON THE SUMMER DIET OF ROUGH-LEGGED HAWKS FROM ALASKA

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Winter food habits studies of the Rough-legged Hawk (*Buteo lagopus*) have shown that microtine rodents and other small mammals constitute the bulk of prey taken by this species. Remains of only four birds were found in the stomach contents of 173 wintering Rough-legged Hawks examined by Henshaw (1875), Errington (1933) and McAtee (1935). Craighead and Craighead (1956) reported remains of only four passerine birds among 203 prey identified from pellets of these hawks. This pattern does not seem to continue, however, during the non-breeding season. Although Sealy (1966) reported finding only one bird, a Lapland Longspur (*Calcarius lapponicus*), either in or near Rough-legged Hawk nests in the Perry River region of the Northwest Territories, White and Cade (1971) reported that birds comprised 13% of 171 total prey found in Rough-legged Hawk nests along the Colville River, Alaska in 1967–1969. The present paper reports prey remains collected on the Seward Peninsula, Alaska during the summers of 1971 and 1972.

Individual prey were identified from remains in pellets and from carcasses or parts thereof found in or around nests and near adjacent perching rocks. I took care to exclude those pellets that were not known, with reasonable certainty, to have come from Rough-legged Hawks or to have been deposited during the study. Examination of the pellets collected in this study confirmed Errington's (1930) statement

TABLE 1. Rough-legged Hawk prey items from the Seward Peninsula, Alaska.

	1971		1972	
MAMMALS				
Microtus oeconomus	65		34	
Microtus miurus	43		17	
Dicrostonyx groenlandicus	16		7	
Lemmus trimucronatus	12		7	
Clethrionomys rutilus	8		2	
Microtus sp.	6		2	
TOTAL MICROTINES		150		69
Citellus parryi	9		5	
Lepus sp.	2			
Mustela rixosa	1			
Mustela erminea	1		1	
TOTAL		13		6
BIRDS				
Lagopus sp.	12		2	
Pluvialis dominica	2			
Turdus migratorius	1			
Moticilla flava	1			
Anthus spinoletta	1			
Passerella iliaca	1			
Unidentified passerines	11		32	
TOTAL BIRDS		29		34
TOTAL PREY		192		111

that bones do not occur regularly in buteo pellets. Mammalian prey were easily identified, however, from teeth, which were common in the pellets. Enamel patterns on the occlusal surfaces of microtine teeth are species-specific (Bee and Hall 1956) and identification of microtine species from teeth is routine. Error, which might be introduced by recording either one or two items after finding complementary jaw halves in two pellets, was reduced because of size differences between individual prey.

Pellets that contained avian remains were easily recognizable from the feathers found within. Although these feathers did not survive digestion well enough to distinguish species (except in the case of white ptarmigan feathers) they could be used to indicate the relative size of the prey. Because of this loss of feather integrity, the total number of birds identified from pellets may be less than the actual number of individual bird remains contained in the pellets.

Table 1 lists the numbers of birds and mammals of each species identified. Although microtine rodents comprised the largest group of prey, 78% in 1971 and 62% in 1972, ptarmigan (*Lagopus sp.*) and small birds were also of major importance. Together, these two groups represent 17% of the total food items in 1971 and 33% in 1972. Arctic Ground Squirrels (*Citellus parryi*) contributed 5% to the total each year and were the only mammalian species besides microtines that should be considered important in the Rough-legged Hawk's diet.

The number of each microtine in the sample probably represents the relative abundance of these animals within the hunting territories of the hawks, rather than specific dietary preferences. The greater number of birds identified in 1972 may suggest generally low numbers of microtines on the peninsula during that summer.

Most remains of small birds were of fledglings; however, all but one ptarmigan were adults. A 3–4-day-old passerine nestling was found in one nest. Because very young birds have incompletely ossified bones and because they do not yet have contour feathers, their remains could easily be missed in a food habits study. This age class of birds, therefore, may also contribute significantly to the Rough-legged Hawk's summer diet and the total avian contribution to this diet may be even larger than reported.

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DUCK NEST PREDATION BY GULLS IN RELATION TO WATER DEPTH

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At Farmington Bay Waterfowl Management Area, Farmington, Utah, two adjacent marshes received different degrees of nest predation by the California Gull (*Larus californicus*). Predation by the California Gull on waterfowl eggs has been noted by Greenhalgh (1952), Odin (1957), and Behle (1958) and the pattern is similar to that of several other larids (Vermeer 1968, Bourget 1973).

Marsh A, 52.6 ha, was bordered on the south and east by a gravel dike and on the north and west by the Great Salt Lake. Water depth in this marsh averaged 15 cm during May and June 1973, with maximum depths of 35 cm encountered during periods of flooding. Marsh B, 20.2 ha, was located within the