

Most of the species (exceptions being ducks and the Belted Kingfisher) listed in Table 1 fed on the numerous dead shad that were forced up on the beach, frozen into the ice, or dropped on the ice by eagles or crows. Bald Eagles utilized both dead and live shad, but preferred the latter. In most instances the smaller passerines and the woodpeckers fed near the banks. Occasionally, however, individuals fed on the ice at distances up to 200 feet from the shore and cover. The gulls arrived in the area during March and fed on the dead shad that were freed as the ice thawed.

During a 10 minute period (1315 to 1325 hours) on 27 January 1965, Alfred Bjelland, Gary Schnell, and I recorded the following birds feeding on shad remains left from earlier feeding activities of eight Bald Eagles and many crows: 1 Red-bellied Woodpecker, 1 Red-headed Woodpecker, 3 Downy Woodpeckers, 1 Blue Jay, several Common Crows, 4 Black-capped Chickadees, 1 Tufted Titmouse, 1 White-breasted Nuthatch, 4 Cardinals, and 10 Slate-colored Juncos. In nearby trees, were a Red-tailed Hawk and a Red-shouldered Hawk. The sky was clear and the temperature about normal; however, the preceding three days had included heavy rain, some sleet, and finally three inches of soft snow.

Weston (*Auk*, 80: 550-551, 1963) reported 11 species of birds feeding on several species of dead fish on 30 March in Iowa. All but two of the species (Ring-billed Gull and Common Crow) recorded by Weston are different from those I recorded. Thus, in the two areas, 27 species of birds have been observed feeding on dead fish in mid- or late-winter. Some of the species I recorded feeding on fish, although present in Weston's area, were not observed utilizing this food source in Iowa. Weston suggested that permanent residents use fish as emergency food; however, it appears to me that shad may represent a regular and substantial portion of the winter diet of several species occurring in northwestern Illinois. Some of the birds involved are not normally expected to feed on foods of this type (e.g., Slate-colored Juncos).

It appears that the gizzard shad play an important role in maintaining winter populations of several species of birds and mammals found in northern Illinois. Perhaps similar situations exist in other areas. This factor should be taken into consideration during formation of management practices aimed at control of gizzard shad and related forms.—WILLIAM E. SOUTHERN, *Department of Biological Sciences, Northern Illinois University, DeKalb, Illinois*.

Notes on the food habits of the Korean pheasant.—The contents of 11 crops and 17 gizzards of the South Korean Ring-necked Pheasant (*Phasianus colchicus karpowi*) were obtained during September, October, and November, 1953, in northern Kyonggi-do Province, Paju-gun County, Korea. This area is located immediately south of the 38th parallel near Seoul and is marked topographically by steep-sided ridges and hills dissected by numerous low-lying valleys and flood plains. The valleys are planted mostly to rice (*Oryza sativa*), while the contiguous hills and ridges support moderate to dense stands of low-growing black pines (*Pinus thunbergii*) and oaks (*Quercus* sp.). Many small sites adjacent to the rice fields are planted to grain sorghum (*Sorghum vulgare*), or other field-row crops, or both. The juxtaposition of the rice paddies, pine-oak forests, and small farm plots appears to provide excellent pheasant habitat. Taka-Tsukasa (*vide* W. H. Bohl, Special Scientific Rept.-Wildl., No. 83. U. S. Fish and Wildl. Serv., 1964; see p. 56) stated that in these habitats of South Korea pheasants eat fruits, grass seeds, young shoots, chestnuts, acorns, grains from crop lands, soybeans, and red beans. He also mentioned that grasshoppers, ants, field mice, small reptiles, snails, and earthworms are eaten.

TABLE 1
FOOD CONTENT OF 11 CROPS OF THE RING-NECKED PHEASANT IN KOREA

Item	Per cent total volume ¹	Per cent frequency of occurrence	Number of seeds per sample	
			Mean	Maximum
<i>Oryza sativa</i>	24.3	54.5	238.3	928
Unidentified grasses				
Seeds	15.8	—	—	—
Leaves and stems	4.4	—	—	—
<i>Sorghum vulgare</i>	13.0	36.4	63.5	155
<i>Vigna sinensis</i>	7.6	36.4	16.7	60
<i>Quercus</i> sp.	7.0	45.5	0.5	1
Unidentified forbs				
Seeds	5.3	—	—	—
Leaves and stems	1.5	—	—	—
<i>Strophostyles</i> sp.	6.7	27.3	26.0	52
Insects				
Cicadellidae	5.0	15.2	—	—
Orthoptera	0.8	30.3	—	—
<i>Glycine max</i>	3.8	9.1	—	17
<i>Melampyrum</i> sp.	2.9	27.3	26.6	84
<i>Pinus</i> sp.	0.8	27.3	1.0	2
<i>Indigofera</i> sp.	0.4	9.1	—	27
<i>Setaria</i> sp.	0.4	18.2	72.0	153
<i>Lespedeza bicolor</i>	0.3	18.2	—	2
<i>Panicum</i> sp.	<0.01	9.1	—	18

¹ Grit constituted 2.6 per cent of the total volume but was not included in these calculations.

TABLE 2
FOOD CONTENT OF 17 GIZZARDS OF THE RING-NECKED PHEASANT IN KOREA

Item	Per cent total volume ¹	Per cent frequency of occurrence	Number of seeds per sample	
			Mean	Maximum
Unidentified grasses				
Leaves and stems	45.9	—	—	—
Seeds	2.8	—	—	—
Unidentified forbs				
Leaves and stems	15.4	—	—	—
Seeds	1.0	—	—	—
<i>Quercus</i> sp.	12.9	23.5	0.7	2
<i>Oryza sativa</i>	4.9	23.5	11.5	29
<i>Sorghum vulgare</i>	4.8	17.6	40.0	93
<i>Strophostyles</i> sp.	3.7	17.6	20.3	45
<i>Indigofera</i> sp.	3.3	23.5	33.7	131
Insects				
Coleoptera	1.1	13.7	—	—
Cicadellidae	0.6	27.5	—	—
<i>Polygonum</i> sp.	1.1	29.4	15.6	29
<i>Melampyrum</i> sp.	0.8	11.8	93.0	182
<i>Glycine max</i>	0.6	5.9	—	5
<i>Lespedeza bicolor</i>	0.6	29.4	5.2	16
<i>Pinus</i> sp.	0.3	5.9	—	—
Mollusca (snail)	0.2	5.9	—	—

¹ Grit constituted 40.7 per cent of the total volume but was not included in these calculations.

Results of the present study (Table 1) show that the fruits of rice, unidentified grasses, sorghum, *Vigna sinensis*, and oak constituted the primary items in the samples from pheasant crops. These materials accounted for approximately 68 per cent of the total volume of food items taken from the crop.

Table 2 shows the analysis of gizzard contents. These data indicate that the leaves and stems of grasses (mostly rice) comprised about 46 per cent of the total volume of food items in the gizzards, while the leaves and stems of forbs constituted approximately 15 per cent. The fruits of oak, rice, and sorghum accounted for an additional 22 per cent.

Data from these small samples suggest, therefore, that during the fall farm crops and oak mast, as well as grasses and certain forbs, are major food sources for the South Korean Ring-necked Pheasant in the region where the study material was collected. Among farm crops, rice and sorghum are the most important items, while *Vigna sinensis*, *Strophostyles* sp., and *Indigofera* sp. are notable among the forbs.

Plant seeds were identified by Dr. A. C. Martin, formerly of the Patuxent Wildlife Research Center, U. S. Fish and Wildlife Service, Laurel, Maryland.

Identification of the subspecies *karpowi* was made by Dr. O. L. Austin, Director, Florida State Museum, from two specimens collected by the senior author in Kyonggi-do Province.—C. M. LOVELESS, *Denver Wildlife Research Center, Bureau of Sport Fisheries and Wildlife, Denver, Colorado*, and G. BEAR, *Colorado Game, Fish and Parks Department, Fort Collins, Colorado*.

The Red-winged Blackbird in Alaska.—Previously published reports of the Red-winged Blackbird (*Agelaius phoeniceus*) in Alaska include only five occurrences, separated widely both geographically and temporally: a female collected at Wales on 6 June 1929 (A. M. Bailey, *Condor*, 32: 161, 1930); a male taken at Barrow on 28 June 1940 (A. M. Bailey, *Birds of arctic Alaska*, Colorado Mus. Nat. Hist., 1948; see p. 290); a male collected at the mouth of the Stikine River, at Sergief Island, on 1 July 1946, and a female taken at Mole Harbor, Admiralty Island, in summer 1924 (J. D. Webster, *Condor*, 50: 229, 1948); and a small colony with some evidence of breeding observed on the Bremner River during 1957 and 1958 (P. E. K. Shepherd, *Condor*, 64: 440, 1962). Recently a number of additional records have come to my attention, and it appears as if the species is a well established summer resident in the upper Tanana Valley.

During June, 1964, I found Red-wings uncommon but widely dispersed through the lake region immediately east of Tetlin Lake (63°05' N, 142°40' W). The species was first reported from this area on 25 June 1961 when an adult male was seen at Gasoline Lake by Donald E. McKnight and Ray Parent, then of the U. S. Fish and Wildlife Service (McKnight, *in litt.*), but it had not been reported again until my observations in 1964—largely, I think, because nobody interested in passerines had worked in the area. On 10 June 1964, I collected a first-year male undergoing wing molt (University of Alaska no. 2383; testes 10.3×6.5 , 9.1×7.9 mm) at Gasoline Lake, and saw another male singing on the northeast shore of Butterfly Lake. On 12 June in this same area, I saw two males and heard another. On 14 June my co-workers and I visited Fish Lake and found a territorial pair of Red-wings, about five air-line miles south of Gasoline Lake. On 18 June, Karl B. Schneider and Dwain A. Davies, of the University of Alaska, located a small colony of territorial birds about a small pond on the southeast shore of Tetlin Lake; they collected an adult female with a brood patch (UA 2387; largest ovule 2.5 mm) but were unable to locate a nest.