

On May 12 and again on May 13, 1952, a perfect example of a male hybrid Cinnamon Teal x Blue-winged Teal was seen by the writers in a canal on Lower Klamath National Wildlife Refuge, Siskiyou County, California. The body coloration of this bird was similar to, though slightly paler than, that of a Cinnamon Teal, with indistinct round, black spots on breast and sides. A white crescent in front of the eye appeared to be almost as clear as that of a Blue-winged Teal.

On May 15, 1952, a male Cinnamon Teal and a male Blue-winged Teal were seen in characteristic courtship flight, both pursuing a female of one of the species. Blue-winged Teal are of fairly common occurrence, although by no means abundant, in this section of the state, apparently arriving somewhat later than the Cinnamon Teal. In 1952 the first sight record for the former was April 29. By this time a few Cinnamon Teal were already beginning to nest.—WILLIAM ANDERSON and A. W. MILLER, *California Department of Fish and Game, Tulake, California, July 20, 1952.*

Additional Notes on Korean Birds.—From mid-November, 1951, to June, 1952, the writer was stationed with the United States Army at various points in Korea and was able to make a few limited observations of local birds. About thirty specimens were collected, but since the only guns available were M1 rifles, carbines, and an occasional 12-gauge shotgun, their condition is generally poor. Such skins as seemed salvageable have been deposited in the Museum of Vertebrate Zoology at Berkeley, where identifications were made.

Since the observations of Wolfe (Auk, 67, 1950:533-455) and Fennell (Condor, 54, 1952:101-110) are much more complete than mine, the following notes have been selected as supplementary. Principal observations were made in Kangwon Do, a few miles southeast of Kumsong and five miles south of the cease-fire line, and on the peninsula east of the harbor of the city of Pusan, in Kyongsang Namdo.

Anas crecca crecca. A female Eurasian Teal was taken by hunters on the Naktong River near Kumbae, north of Pusan, on March 14, 1952, along with a number of mallards.

Buteo buteo burmanicus. A male Japanese Buzzard was collected on December 3, 1951, south of Kumsong. It had been working through the deciduous woods along a ridge, and its stomach and gullet contained three small mice.

Synthliboramphus antiquus. Two males from a small flock of Ancient Murrelets were taken just outside of Pusan harbor on March 28, 1952. A small cove with nearly vertical walls of bare rock standing fifty to one hundred feet above the water protected the birds from a strong northwest wind, and they stayed close inshore or flew along the cliffs with several Black-tailed Gulls (*Larus crassirostris*). They were not seen after this date.

Otus bakkamoena ussuriensis. A female Scops Owl flushed from a stream bank into chest-high scrub pine along a mountain side east of Pusan on March 3, 1952. Her red eyeshine was clearly visible in the waning light. She never flew higher than the tops of the trees, and was shot while perched on a branch less than eighteen inches above the ground. The matted hair and bones of a single mouse were found in the stomach.

Dendrocopos kizuki acutirostris. On January 1, 1952, a male Pygmy Woodpecker was collected in a deciduous woods south of Kumsong, Kangwon Do.

Hirundo rustica. The first House Swallows were seen at Pusan on April 11, 1952, when a flock of about 15 flew in over a beach east of the city. From this time on they were common everywhere. A nest containing two eggs and two young was observed under the eaves of a house at Sachon, Kyongsang Namdo, on May 31, 1952.

Cyanopica cyanus koreensis. A group of ten Blue Magpies was found in the brush along a small river near Kumsong on January 1, 1952, and one bird was taken. This species was not seen to associate with other birds in the valley, although crows and magpies were frequently together. A call of *chweee chweee* or *bzzzzzz chweee chweee*, with a shrill rising inflection, revealed their movements through the brush.

Parus varius varius. A male Varied Tit was collected in the vicinity of Kumsong on January 1, 1952. While other tits and buntings flocked together through the brushy stream borders, this bird was found alone in a solitary oak near the center of the small valley.

Saxicola torquata stejnegeri. Pairs and individual Japanese Stonechats were seen occasionally in the first two weeks in April, 1952, in the vicinity of Pusan. They were generally to be found in brush and small trees along paddy margins or in steep-sided draws, in company with Meadow Buntings (*Emberiza cioides*) and Greenfinches (*Chloris sinica*).

Phoenicurus auroreus auroreus. A female Daurian Redstart was collected by pheasant hunters on March 30, in the vicinity of Kumhae, just north of Pusan. The ovary was enlarging, the follicles distinct.

Luscinia akahige. This record of the Japanese Robin is apparently the first for Korea. A single bird was flushed from a dense cluster of rose bushes along a small stream east of Pusan on April 11, 1952. Two were found in the same place on April 18, and a female was collected. These birds flushed very reluctantly and flew only short distances at a time, but they were very difficult to see since they stayed close to the ground in the depths of the thicket almost entirely. The female remained nearly motionless and invisible for fully five minutes, against a background of brown leaves on the ground but otherwise quite in the open, before I caught a slight movement of her head. These birds were probably stragglers. The ovary of the bird collected was small (6×4 mm.).

Regulus regulus japonensis. A male Golden-crowned Kinglet was collected at dusk on April 1, 1952, in a pine woods east of Pusan.

Emberiza elegans elegans. A male Yellow-throated Bunting was taken on January 1, 1952, near Kumsong from a small flock of tits and buntings in the brush along a stream.—RICHARD M. STRAW, Rancho Santa Anita Botanic Garden, California, August 12, 1952.

Erythrocyte Permeability and Bird Relationships.—Recently attention has been given to the delineation of animal relationships by using techniques derived from physiology and biochemistry. Prominent among investigators engaged in this work are Boyd and Boyden and Irwin (serology), McCabe and Deutsch (protein electrophoresis), and Jacobs and his co-workers (hemolysis). The latter (see, for example, Jacobs, Glassman, and Parpart, Jour. Exp. Zool., 113, 1950:277-300) have shown that the permeability of vertebrate red blood cells to certain penetrating solutes is similar within a vertebrate class and distinct between classes. Thus a bird's erythrocytes have permeability relations characteristic generally of the class Aves and differing distinctly from those of mammals, reptiles, amphibians, and fishes.

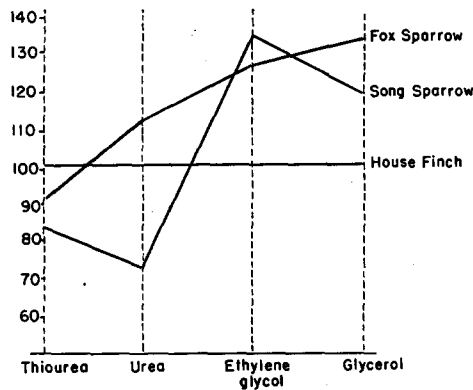


Fig. 1. Times of hemolysis of erythrocytes of House Finch shown as 100 per cent; times for Fox Sparrow and Song Sparrow shown as percentages of values for House Finch.

A current hemolytic theory holds that the configuration of the molecules on a cell surface will be partly reflected in the behavior of penetrating solutes at the cell surface. This surface configuration is sufficiently complex that only a portion of it will enter into the permeability relationships with any given substance. This accounts for the differences in time of permeability of various substances regardless of their shape or molecular weight. It is only to be expected that species which are considered close relatives on conventional grounds will be as "closely related" at the cellular level, and that they will reflect this in similar times of hemolysis for a particular solute. This report outlines a study made