

but a few individuals have ventured up the Trinity River as far as Willow Creek in Humboldt County. They have been noted perched on water-rounded boulders either in or on the bank of the river or else feeding at the base of a shallow riffle.

Larus occidentalis. Western Gull. Again, as with the two species of cormorants, the salmon runs determine the time that this large gull is noted along the river. The general situation is similar. The gulls do not dive for the feeding scavenger fish and crustacea but instead feed on the carrion. They normally feed in shallow water or else on the gravel bars. One gull remained until mid-December of 1951 when it was finally driven away by high water. This bird was a two-year old judging by the plumage. All others were immatures in the dark gray plumage. The first high water sweeps the offal from the bars and the gulls and cormorants leave the river.

Numenius americanus. Long-billed Curlew. There is one record for this shorebird. A single individual was noted flying over the river at daybreak on September 3, 1952, at Willow Creek, Humboldt County.

Colaptes auratus borealis. Yellow-shafted Flicker. Each winter many flickers move into the bare walnut orchards along the river. Among them individuals are noted with a yellow or yellowish cast to the tail and wings. The color range is great. On December 10, 1950, one female was closely observed and finally collected. It turned out to be a pure *Colaptes auratus borealis*. This bird was taken while feeding on discarded walnuts at Willow Creek.

Sayornis saya saya. Say Phoebe. In March, 1950, Say Phoebes were noted along the river from Hoopa south to Salyer. A female was collected on March 8, 1950. On March 12, 1951, the birds were again noted, as well as March 2, 1952. In 1953 a continuous rain fell during much of March and no birds were noted. The evidence indicates an unrecorded migration route for small numbers of this species.

Mimus polyglottos leucopterus. Mockingbird. On May 22, 1952, a female in worn plumage was taken from a fence in Campbell's Field, Hoopa Valley Reservation. The bird was in postbreeding condition, and the feathers were severely worn. No other birds of this species have been noted.

Buteo lineatus elegans. Red-shouldered Hawk. A female was collected on May 10, 1953, in non-breeding condition and worn plumage. Another was observed flying close overhead on May 30, 1953. Both of these records are from the open fields at Willow Creek, Humboldt County.

Agelaius phoeniceus caurinus. Red-winged Blackbird. Scattered along the Trinity River are a few small grassy marshes that in some years are dry. Two of these small marshes are at the Hoopa Valley Reservation, and two are at Willow Creek; one is at Salyer. In wet years a small population of Red-winged Blackbirds is found in each marsh. In dry years only one at Willow Creek and one at Hoopa remains. On May 7, 1950, a pair of the birds was taken with their nest and four eggs at the Salyer Marsh. Dr. Orr examined the skins and identified them as *caurinus*. The nearest known breeding colony of this subspecies is at Humboldt Bay. This is about forty miles westward and over two ranges of mountains.

Molothrus ater obscurus. Brown-headed Cowbird. Cowbirds have been noted each spring and summer in this area. On April 20, 1952, a pair was taken at Hoopa. The birds have been noted in all suitable habitats throughout the area. This is a major extension northward.

Junco hyemalis hyemalis. Slate-colored Junco. A single unsexed specimen was taken at Willow Creek, Humboldt County, on January 10, 1953. Although *J. h. cismontanus* is a regular winter visitor, the nominate form has not been noted in the area before.

Passerella iliaca brevicauda. Fox Sparrow. This bird has been recorded from the South Fork Mountain in Trinity County. The writer has noted it as far north as Sugar Pine Mountain in Humboldt County, during the summer and has collected a breeding male and female on Horse Mountain, Humboldt County, on June 12, 1952. This is a northern extension of the range by thirty miles.—
ROBERT R. TALMADGE, *Willow Creek, California, June 9, 1953.*

The Earliest Mention of Territory.—The concept of territory proves to be as old as the science of ornithology, since Aristotle was the first writer to mention it. This was pointed out by Lack (Condor, 46, 1944:108), who, however, did not follow the subsequent history of these observations. About 350 B.C. Aristotle wrote: "Each pair of eagles needs a large territory and on that account allows no other eagle to settle in the neighborhood. They do not hunt in the immediate vicinity of

their nest but go far to find their prey" (my translation from the German of Aubert and Wimmer, Aristotle, Book 9, chapt. 32, 1868). Thompson (Aristotle's *Historia Animalium*, vol. 4, 1910) translates the first sentence thus: "A pair of eagles demands an extensive space for its maintenance, and consequently cannot allow other birds to quarter themselves in close neighborhood." An examination of the Greek shows that Aristotle said neither *other birds* nor *other eagles*, but simply *others*. As immediately before this statement he had told of eagles driving off their own grown young, it seems to me that in this case Aubert and Wimmer made the better translation.

Here are the elements of isolation and intolerance and the parcelling out of the land in relation to the food supply. Aristotle's statement can be traced for over two thousand years subsequently. Pliny (Bostock and Ripley, *The Natural History of Pliny*, book 10, chapt. 4, 1855) in the first century A.D. gave an even plainer description of territory: "And indeed, under any circumstances, one pair of eagles requires a very considerable space of ground to forage over, in order to find sufficient sustenance; for which reason it is that they mark out by boundaries their respective allotments, and seek their prey in succession to one another."

The two most distinguished naturalists of the middle ages also mentioned isolation and food value. Frederick II of Hohenstaufen about 1248 wrote in regard to birds of prey: "A single hawk generally hunts alone and not in the territory of other rapacious birds," (Wood and Fyfe, Frederick II of Hohenstaufen, 1943:29). "After fledglings have learned to fly and to hunt avian prey, the parent drives them away not only from the immediate neighborhood of the eyrie but from the entire nesting locality. Were the mother and her offspring to hunt in the same territory their avian quarry would soon take fright and there would soon be insufficient food to supply the needs of the whole family" (p. 56).

Aristotle's account of the eagle and territory was repeated by Albertus Magnus (about 1260), but attributed to the vulture. In book 8, chapter 102, he stated: "Vultures nest in highest places and on highest trees and feed their young till they can fly, then eject them from the nest and do not permit them to live in a certain region because of a paucity of food, for one pair of vultures in seeking food occupies a large space and therefore other vultures are not permitted near in the breeding season. With this bird and almost all eagles hunting is not done near the nest but at a great distance" (my translation from the Latin in Stadler, Albertus Magnus, 1915:614).

It is not clear why Albertus substituted vulture for eagle. I have not seen Michael Scot's translation of Aristotle on which Albertus based his first 19 books. The preliminary passage in which Aristotle had related an Egyptian myth is as follows: "In old age the upper beak of the eagle gradually grows longer and more crooked, and the bird dies eventually of starvation; there is a folk-lore story that the eagle is thus punished because it once was a man and refused entertainment to a stranger" (Thompson, *op. cit.*, book 9, chapt. 32, 1910). This tale also referred to the vulture, but the subsequent text reverts to eagles. With the ancients vultures and eagles were frequently confused, and generally in Scripture, instead of "eagle" we should read "vulture" (Thompson, *A Glossary of Greek Birds*, 1936).

Two of the most important naturalists of the Renaissance also paraphrased Aristotle's statement. Gesner (*Historia Animalium*, liber 3, 1555:7) declared that as soon as the young eagles can fly they are driven by the parents into another country, since each eagle must have for itself a wide stretch for hunting; they cannot remain beside each other. The same story was told by Aldrovandi (*Ornithologiae*, 1600, 1:38) and this is how Willughby (*Ornithology of Francis Willughby*, 1678:57) translated it: "When their young now are grown up, and come to that age and strength, that they can without the help of their Parents get themselves meat, they drive them far away from their Nests; nay, they will not suffer them to abide so much as in the same country."

Finally, Buffon wrote (*Histoire Naturelle des Oiseaux*, 1, 1770:63): "The eagle is as solitary as the lion, inhabiting a desert to which he forbids the entrance and use for hunting to all other birds, for it is perhaps more uncommon to see two pairs of eagles in the same part of a mountain than two families of lions in the same part of the forest; they keep themselves far enough from each other so that the space may provide them with ample sustenance; they only measure the value and extent of their kingdom by the product of the chase."

It was Aristotle, then, who declared that eagles partition out the land according to their needs for food, and this statement was incorporated into the books of Pliny, Frederick II (in regard to birds of prey), Albertus Magnus (transferred to vultures), Gesner, Aldrovandi, Willughby and Buffon.—MARGARET M. NICE, *Chicago, Illinois, May 20, 1953.*