

## SWAINSON'S HAWK IN WASHINGTON STATE.

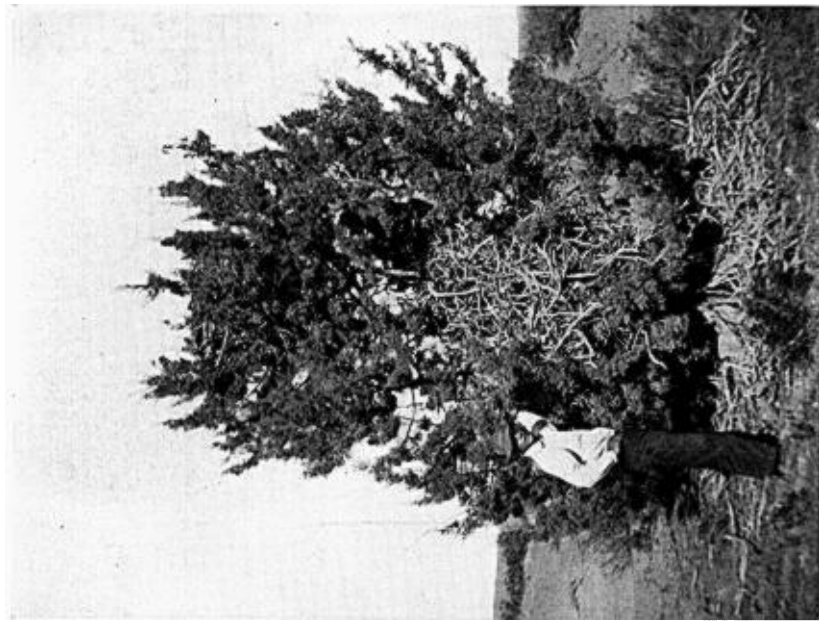
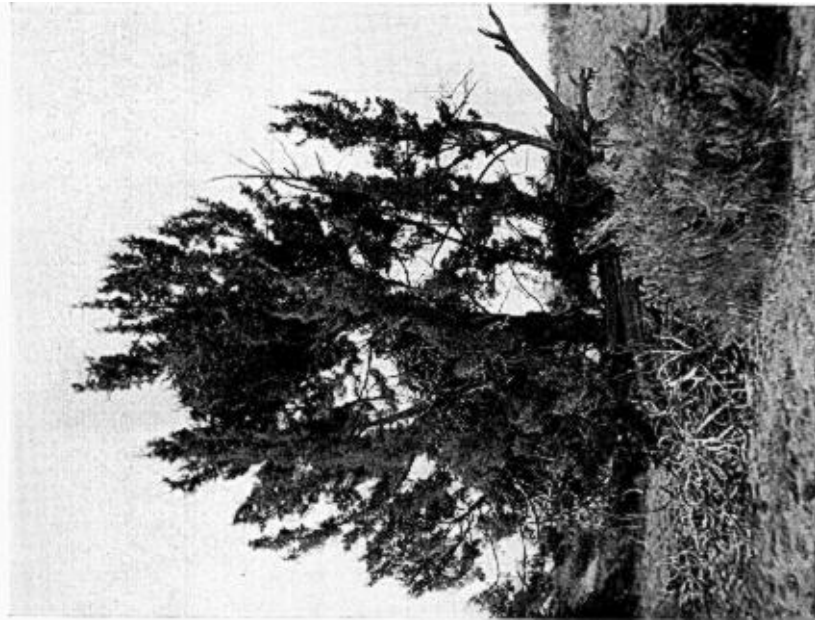
BY J. HOOPER BOWLES AND F. R. DECKER.

*Plates XV-XVI.*

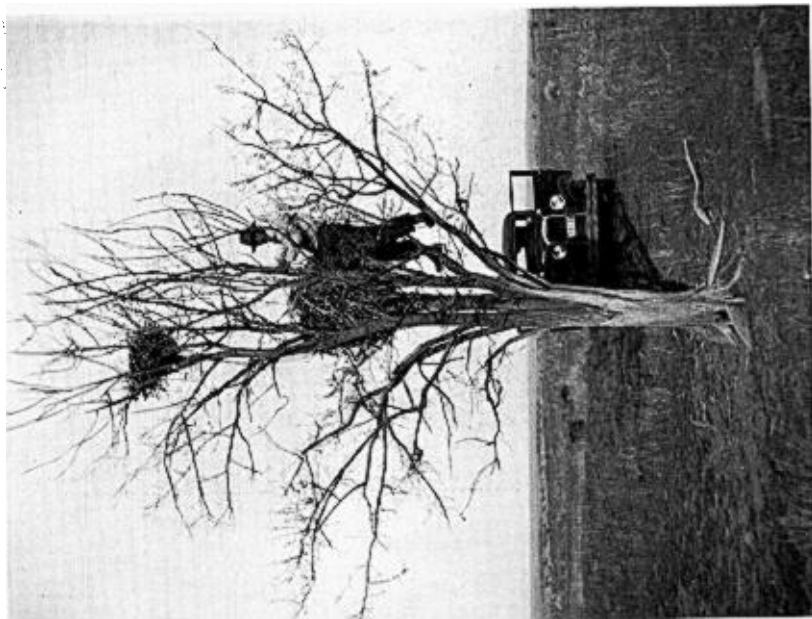
THE Swainson's Hawk (*Buteo swainsoni*) is still one of the most abundant Raptores throughout many parts of eastern Washington, in spite of continual persecution by sheep herders and the so-called "varmint hunts" that are organized by certain sportsmen's organizations. Education as to the beneficial habits of this Hawk seems, for the most part, equally useless with either of the classes mentioned, although a few of the sportsmen are beginning to see the right side of the matter. The Cascade Mountains, which divide the coast district from what we term the "east side," seem to form a barrier over which many birds seldom or never cross. Strange as it may seem, in our thirty-seven years experience in this state we have but one record for this Hawk west of the Cascades. Incidentally, it may be of interest to add that we have no records at all for the Ferruginous Rough-leg (*Buteo regalis*) west of the Cascades, although it is by no means rare in certain localities on the east side during the summer. In fact, there are locations where the two species are so closely associated during the nesting season that it is impossible to give a full description of one without including the other.

Swainson's Hawk is exclusively a summer resident, making its first appearance about the first week in April and leaving surprisingly early in the fall. The spring migration to the northward is very irregular, many continuing to pass through for a considerable period after the local birds have started nest building. They are especially fond of almost treeless regions and might well be called a "prairie" Hawk as they are perhaps most often seen coursing only a few feet above the ground in search of their prey, their long wings making them appear to be very much larger than they really are.

There are two distinct plumages, one practically uniform dark brown, the other a pale-bellied type that is subject to a very great variation in markings. These two phases are about equally com-



TWO VIEWS OF A CONGLOMERATE NESTING: FERRUGINOUS ROUGH-LEG NEST, WITH ONE OF A RAVEN ON TOP AND A SWAINSON'S HAWK ABOVE IT, WITH A MAGPIE'S NEST ON THE SIDE.



NEST OF SWAINSON'S HAWK FOUR FEET FROM GROUND.  
NESTS OF SWAINSON'S HAWK (ABOVE) AND FERRUGINOUS ROUGH-LEG (BELOW).



mon with us, in fact it is not at all unusual to find a nesting pair in which one parent is entirely dark, while the other is the light colored type. It may be of interest to say that in this state the dark phase of the Ferruginous Rough-leg and the Western Red-tail (*Buteo borealis calurus*) is exceedingly unusual, this being particularly true in the former.

Nest-building commences about the middle of April, and, unless the birds have been seriously disturbed, they prefer to repair a nest of the previous year, or years, to building a new one. In its construction the nest is the most carelessly built of any raptor that we have seen, often presenting such a ragged appearance that it would seem almost certain that it could not be occupied. This was especially true of a nest near Dayton, Columbia County, that was very kindly pointed out to us by Mr. Storrs H. Lyman, of Dayton, on June 9, 1933. It was placed sixty feet up in a yellow pine and is very much the highest nest that we have seen, while it was also a very old one and had been used by the birds for many years. Its appearance from the ground was so very dilapidated that we felt certain it could not be occupied, more especially because no end of pounding on the base of the tree could produce any signs of life from the nest. However, Mr. Lyman assured us that the birds were there and upon his climbing up a fine dark colored bird left the nest just before he reached it. In spite of the late date the nest contained two eggs in which incubation was only about half advanced. In with the eggs was a Blue Mountains ground squirrel (locally called "go-down") that was about half eaten and perfectly fresh, which we have prepared as evidence of the beneficial qualities of these Hawks. This nest was also unusual for this country as it was built of coarse sticks, the usual structure being of finer material. The nest, especially in the prairie districts, is composed of much finer material than is usual with the larger Hawks, the greater portion being often made up of the yellow stems of some kind of weed, although slender pieces of sage and greasewood are often used. The lining is most often of fine shreds of bark and green leaves when in a locality where these are obtainable. The nest is also small for a Buteo, seldom being over eighteen inches in diameter by about a foot in depth when newly made. The distance that the nest is built from the ground depends almost

entirely upon the height of the tree selected, although we rarely find them over twenty-five feet up. The tree selected may be a living one, or one that has long been dead, either an evergreen or a deciduous tree being used impartially. The lowest nest that we ever saw contained two slightly incubated eggs and was built four feet above the ground in a dead locust tree, as may be seen in Plate XVI, fig. 1. In certain sections trees are so scarce that a most astonishing and almost unbelievable condition of affairs is found to exist. Several other species of birds use the same trees as *Buteo swainsoni* for their nesting sites, among them being the Ferruginous Rough-leg, the American Magpie (*Pica pica hudsonia*) and the American Raven (*Corvus corax sinuatus*). The ultimate result is that one tree may contain nests of all four species, although not at the same time excepting in the case of the Magpie and the Ferruginous Rough-leg. These two species frequently nest close together in the same tree and we have even found a nest of the Magpie built into the side of one of the Hawk, both nests containing full sets of eggs and all four birds in the tree when we approached. Perfect harmony always seems to exist. Plate XV, fig. 1, shows where all four species nested in the same Juniper tree which was only fourteen feet tall, the Ferruginous Rough-leg having built at least three nests in what may be termed the conglomerate structure seen on the left side of the tree. The lowest of these nests is one of the Ferruginous Rough-leg, directly on top of that is one of the Raven. At the top of the heap may plainly be seen the much smaller nest of a Swainson's Hawk, and joining the three nests together is one of the Magpie, which is directly on top of the Raven nest. In the top of the tree is a new nest of *regalis* that contained eggs at the time the picture was taken, while on the ground may be seen another nest of *regalis* that the birds had evidently tried to build on top of the heap, but which for some reason had not remained in place. At the lower right in the tree is still another nest of *regalis*, a very old one, which is barely a foot above the ground and shows perhaps better than anything else to what extremes these birds will go when pressed for a nesting site. Magpies have such a fascination for joining other large nests together that it is a practical certainty they will incorporate all the nests in the center of the tree by building one

in the now small open space, thus forming what may be termed an unbroken chimney of nests from the top of the tree to the bottom. Plate XV, fig. 2 shows a different view of this structure, a clearer idea of which can be gathered from the fact that the man is five feet, nine inches tall. In Plate XVI, fig. 2 may be seen another type of nesting site, which is a dead locust tree. The lower nest of the two is one of *regalis* and was built and used a year before the upper nest, which is one of *swainsoni*. Here again is an admirable opportunity for Magpies to incorporate the two nests, for the dimensions of their nest make little difference to these absurd birds if they can only find enough material for its construction. In concluding the discussion of nesting sites we have never found a nest of *swainsoni* built anywhere but in a tree.

The eggs are deposited at an unusually late date for such a large Hawk and it is hard to ascribe any definite reason for this unless it is determined by the availability of the right variety of food for the young. The average date for fresh, full sets is about May 15, with surprisingly little variation in a large number of nests. The usual number in a set is three, with two not uncommon and four decidedly rare. They are white in ground color, with a slight tinge of greenish, spotted and blotched very handsomely in some specimens with different shades of brown and gray. These must be considered exceptional, for many are almost unmarked, but the majority may be placed somewhere between these two extremes. In shape they vary from short ovate to oval, while the measurements of eggs in our collections vary from 2.22 x 1.67 to 2.33 x 1.82 inches.

A study of the food supply of Swainson's Hawk convinces us that this species is one hundred percent beneficial, which is frequently made doubly evident by the fact that small birds very frequently nest in the immediate vicinity and sometimes in the same tree. In the low bushes directly below the nest of this Hawk that we have described from Fayton, Washington, we found occupied nests of Wright's Flycatcher (*Empidonax wrighti*), Western Chipping Sparrow (*Spizella passerina arizonae*) and Lazuli Bunting (*Passerina amoena*), while it was perfectly evident that several other species had nests that we failed to locate. A very large percentage of their food consists of ground squirrels of different

kinds and many varieties of insects, while snakes are a favorite item of diet as in the case of the other Buteos. An especially interesting instance of snake eating was afforded us one spring in Benton County, Washington, when we found a medium sized bull snake which had partly accomplished the act of swallowing a young rabbit that looked to us very much too large for it. After watching the seemingly impossible feat being accomplished we continued on our way, but after going on for a few hundred yards we looked back and saw a Swainson's Hawk rising from the ground with what must almost certainly have been the same snake dangling from its claws. The student of wild life, in spite of all its beauty, is frequently forced to the realization that nature is all too frequently a continuous tragedy.

*Tacoma, Washington.*