## The Grey Goshawk in Captivity

By E. L. HYEM, R.A.O.U., Barrington, N.S.W.

On October 29, 1929, two young Grey Goshawks (Astur novæ-hollandiæ) were obtained by the somewhat risky method (from their point of view) of our shooting away the branch holding the nest, which was about 60 feet from the ground in a large fig-tree in the brush. Both parents, which were grey, were seen about the nest, and as one of them was sitting on September 22 the young cannot have been more than four weeks old, probably a good deal less. When the branch was shot through it did not snap off, but bent down at right angles, and the nestlings, though almost upside down, clung to the nest for quite half an hour, until finally one dropped down, exhausted. This one I managed to catch, and a few seconds later branch and all came down. The other young bird was thrown clear, and landed safely,

its fall being broken by the brush trees and vines.

They were beautiful little objects, covered with soft, white down, only the slaty-grey wing and tail feathers showing through. Cere and legs were yellow, and the irides were dark brown. On being placed on the verandah they squatted down with heads stretched out, after the manner of young Plover, but soon began to take an interest in their surroundings. When I approached they stood up and endeavoured to strike my hand with their claws, but not having any support behind they fell over backwards. then placed them in a large basin, and with their backs against the wall of this they could strike with lightninglike suddenness. Never at any time did they attempt to use their beaks as a means of defence. Though their feet and legs were large and well developed, there was little strength in them, for after staggering a few steps in a clumsy sort of way the youngsters invariably toppled over. From the outset one was very much quieter than the other, and did not object to being handled, though even it was liable to strike at a hand making a sudden movement in front of it. I fed them at first on small pieces of rabbit, which they would snatch from my fingers, at the same time uttering a low piping note. They had one most amusing habit. If one of them failed to snatch its piece of meat at the first attempt, it would immediately rush off and hide its head behind a tin or box, as if ashamed of its failure. And it would take quite a lot of coaxing to get it upon its feet again for a second attempt.

The young birds grew very fast, and on November 5, when aged probably about four weeks, feathers were beginning to show on their backs; the wings were well developed and slate grey in colour, the inner sides being

They could fly short distances. lighter, with dark bars. On November 8 feathers were beginning to show on head, breast and flanks, and a few days later the birds could fly so well that I clipped their wings and allowed them the run of the orchard. On November 14 the feathers on the under-parts were beginning to show, and most of the down had disappeared from the upper parts. Ten days later they were fully feathered except for a little down on the throat The penultimate feather on each side of the tail is ashy-brown instead of grey; I mention this because and thighs.

I have not seen it in any description.

On one occasion I experienced the strength of the claws of one of them. Instead of taking a proffered rabbit leg, it jumped on to my hand, drove its claws in, and squeezed several times—no doubt an excellent demonstration of how it kills its prey, but an extremely painful one, too. December they were placed in a large wire-netting enclosure, and remained there for about twelve months, during which time there was no alteration in plumage, though the eyes changed a little to a reddish-brown. They proved a source of attraction to other Goshawks, both Astur novæhollandiæ and A. fasciatus, and one of the latter stayed about for a week. It was a very large specimen in beautiful plumage, and as it seemed rather quiet I fed it, in the hope of getting a photograph. In a day or two it would come down as soon as the meat was placed on a post, and completely disregarded the camera. However, the weather was against me, and the two plates I was able to expose both showed a slight movement of the head, although the rest of the body came out in fine detail. Fortunately, at the end of a week it moved on; fortunately, because it was beginning to worry the fowls, and I would not like to have destroyed so useful a bird.

The Goshawks were fed mostly on rabbits, with an occasional rat, which they seemed to like best of all. lizards and cockchafer beetles were also relished. this year (1931) they did not seem to be getting on very well together. The quiet bird bullied the smaller intractable one, and so they were liberated in hopes that they would make for the brushes. All efforts to drive them away, however, failed, and I continued to feed them, hoping to save the fowls; but in vain, for the intractable one refused to leave them alone, and after it had killed two I very reluc-

tantly shot it.

The other bird has now been about for several months, and is quite tame. It usually sits on top of the meat-house in the morning until it is fed, and has become quite expert at catching pieces of meat thrown to it, though at first it used to miss more often than not. It does not worry the fowls, and does not appear to chase the birds. It evidently

catches a little food for itself, because I have seen it eating a young rat and several small lizards, and also chasing dragon-flies along the creek. It is rather scared of a pair of Whistling Eagles which are always about the house, and which chase it as soon as they see it fed. But the Goshawk usually beats them by going under the house. These Whistling Eagles also chase the dogs and fowls for scraps, but, strangely enough, the latter do not seem to fear them. My object in keeping these Hawks was to note any changes in plumage which the birds might undergo, but apparently they leave the nest exact replicas of their parents, though I think the wavy bars on the breast become less pronounced with age.

Bird Protection.—Acts of Parliament are most beneficial and necessary for the protection of birds, but I feel that in the long run greater good will arise from educating the public to take an interest in our birds and to realise the *immense importance* they are to our welfare. Much towards this end can be done by lecturing to children in school.

In my travels in the bush I have always found teachers very willing to spare me half an hour of school time to talk to the youngsters about birds. Every member of the R.A.O.U. can in this way do his bit, for it requires no power of oratory, and your audience is not critical; on the contrary, they are—I have always had to deal with bush children—generally very interested, and if you overcome their shyness you will be asked many questions.

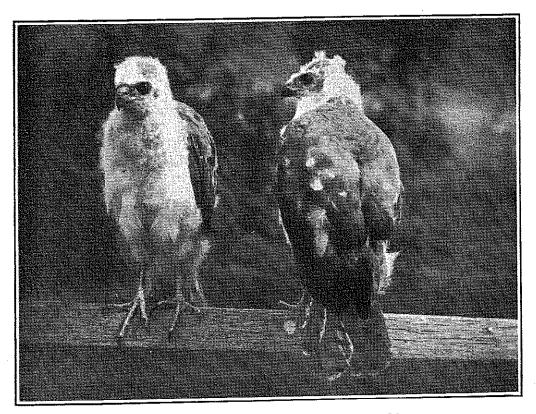
Points to stress readily arise: the beauty and interest of our birds, the wonder of their nests, different forms to suit different conditions, brush-tongues for honey-eating, long legs for wading, webbed feet for swimming, our mound builders, bower builders, wingless birds, mimics, etc.; but above all, I impress on the children the importance, the immense importance, that birds are in keeping in check the myriad hosts of insect pests that, without the aid of the birds, would destroy all plant life and bring about our starvation.

A lot of good can be achieved in this way, much more than is generally realised.

Arrangements should be made with the teacher that later the children shall each write an essay on what they have heard, plus their own experience of birds.

Dividing the school into seniors and juniors, and offering prizes (books) for the two best essays, quickens the children's interest, and assures their attention.

I would again impress on our members the importance of doing all they can in this simple but urgent matter. Try it, and it will be found a very pleasant task.—F. L. BERNEY, R.A.O.U., Longreach, Queensland.



The Goshawks on November 14, 1930.



One of the birds on November 24, 1930. Photos. by E. L. Hyem, R.A.O.U.