

roccia, A.P. Mazzenga Edit., Rome, 1967). The 3 mm cord is doubled and wound around line A-D moving toward the karabiner. After 5 turns it is passed back through itself and then fastened onto the karabiner. A small pull stabilizes the knot. Once tied, one or two persons should pull on cord A-D (3.1 in Fig. 4) until it touches the karabiner. The autoblocking knot is then slid back to its original position (3.2 in Fig. 4). At this time it is important to firmly fix cord A-D by tying a small loop in it which is secured to one of the karabiners. This prevents a possible later release of tension.

Attaching the net.—Once ready, the net is attached to the supporting structure in the following manner. The 2 sets of shelf string loops (Fig. 3.III) should be threaded onto cords B-B' and C-C' respectively. The ends of the 2 erection cords are then attached to the terminal rings (Fig. 3.III.f and g) and cords B-B' and C-C' are pulled taut and firmly secured to the ground. The complete erection requires 2 people and can be finished within 4 or 5 hours; dismantling takes less time.

Use of the net.—The handling of the net rig is simple; 2 people hoist the nets up and open them simultaneously by pulling the 2 erection cords (Fig. 3.a). It is lowered and folded by pulling down the erection cords and then the shelf loop rings one-by-one. Each pocket can be successively examined and any netted bird extracted as from an ordinary mist net. We highly recommend the installation of lateral tension cords (Fig. 3.I, dotted lines) which pass through karabiners attached at points X and Y. When lowered, the nets can be furled in the same manner as ordinary mist nets.

Discussion.—The high net capture technique described by Humphrey et al. (op. cit.) is not appropriate for use in an open, windy environment. The net described here worked admirably under such conditions. Our net system was raised and lowered 20–30 times each day for a month without any problem. The materials withstood freezing mist, snow, sub-zero conditions, and winds of 60 km/h. It seems probable that this system could also be adapted to capture birds in the forest canopy, the form of the trees enabling its erection to be quickly achieved.

Acknowledgments.—We wish to thank M. A. Czajkowski, M. Cambrony, and T. Williams for their assistance in use of our net system.—J.-F. DEJONGHE AND J.-F. CORNUET, C.R.B.P.O. (Museum National d'Histoire Naturelle de Paris), 55 Rue de Buffon, 75005 Paris, France. Received 16 Dec. 1981; accepted 28 Oct. 1982.

Observations of Fishing by a Barred Owl.—The diet of Barred Owls (*Strix varia*) and several other species of North American owls includes fish (Errington, Condor 34: 176–180, 1932 and others). Screech Owls (*Otus asio*) and Snowy Owls (*Nyctea scandiaca*) have been reported capturing fish using ice holes cut by fishermen (Bent, U.S. Natl. Mus. Bull. 170:253, 366, 1938), but there are no published descriptions of how Barred Owls hunt for fish although Brown (Kentucky Warbler 56:66–67, 1980) observed a Barred Owl chasing a surface fishing lure. Herein we describe our observations of Barred Owls hunting fish in the St. John's River near Orange City, Florida.

At 1835 on 23 February 1982, we observed a Barred Owl sitting on the rail of the Blue Spring State Park fishing dock. The owl appeared to scan the water intently for about 3 sec, then flew down to the water in a shallow dive and returned to the rail with a fish in its talons. The captured fish was approximately 10 cm long with silver sides and a sunfish-shaped body. The owl picked at the still wriggling fish with its beak, then abruptly flew past us and landed in a large tree approximately 5 m above us and resumed eating the fish. At 1850 the Barred Owl flew back to the dock and again scanned the water until 1915 when chased away by a house cat on the dock. At 1840 on the next night, we again observed a Barred Owl on the dock railing. In the next 12 min the owl made several short flights, landing on pilings which protruded from 0.5–1.5 m out of the water. At each piling it watched the water for several minutes, slowly moving its head from side to side. It then flew approximately one third of the way across the river and hovered about 35 sec over the water before returning to the same initial perch on the dock railing and watched the water below. After 23 min it flew down in a shallow dive and hit the water

with its talons but did not capture a fish. It landed on an old piling nearby but did not resume fishing.—DWIGHT G. SMITH, ARNOLD DEVINE, AND DEBBIE DEVINE, *Biology Department, Southern Connecticut State University, New Haven, Connecticut 06515*. Received 23 Aug. 1982; accepted 28 Oct. 1982.

A Yearling Helper with a Tufted Titmouse Brood.—On 4 May 1979 I banded and color-banded 7 Tufted Titmouse (*Parus bicolor*) nestlings in a nest box in Nashville, Tennessee. The female parent, "Orange," had been banded and color-banded as an HY (hatching year) bird 30 September 1977. The male, marked only with a numbered metal band, was not recaptured and identified. The young fledged successfully and 2 took up winter residence in the home woods and were often observed with their mother and another banded adult. One of the young, "Yellow," was captured 8 times and sighted 15 times from June 1979 through May 1980.

On 20 April 1980 I captured Orange who was incubating 6 eggs in a nest box 80 m from her 1979 nest. By 5 May Orange and her mate, a titmouse wearing only an aluminum band, were industriously feeding small young. At this point I noticed that Yellow was constantly near the nest. Often the first to fly down, Yellow gave alarm and scolding calls and was quickly joined by the parents who interrupted their feeding to fuss when I approached. I limited my appearances near the box because of this interruption and the fear that protracted calling would alert predators. I did not see Yellow feed the nestlings. The parents paid little attention to Yellow and I observed no acts of aggression toward the yearling titmouse.

On 12 May I banded the 6 nestlings while Green flew repeatedly at me, Yellow scolded, and Orange remained out of sight. I then netted the 2 parents. Orange possessed a shrinking brood patch, while the male, identified now by a green band, had a large bare, but smooth and unmarred, abdominal patch. "Green" had been banded as an HY bird 10 September 1977. Yellow was captured on 20 and 21 May 1980 and also showed a smooth bare abdomen.

By 18 May the young had fledged, and after a few days I located 4 or more of them attended by the 3 adults in the middle canopy of the woods 40 m from the nest box. All of the titmice fussed loudly at my appearance. Orange and Yellow fed young birds twice and Green, although he carried a beakful of small caterpillars for a time, swallowed them himself in order to vocalize.

From 8–10 June the three adult titmice were seen with begging young which Orange and Yellow fed. On 30 June Yellow ate alone at the feeder while the young picked in the trees but did not beg. Yellow was not seen again. Orange disappeared in late fall of 1980 and was found again on 23 April 1982 raising a titmouse brood with a new mate 0.5 km from her nest of 1980. Green remained the dominant male Tufted Titmouse of the yard and nested successfully in 1981 and 1982. I observed no helper.

Helpers at the nest are uncommon in the genus *Parus* (Perrins, British Tits, Collins, London, 1979:80, 160). Davis (Auk 95:767, 1978) reports an extra female feeding Tufted Titmouse young; a relationship to the breeding pair was not established. Brackbill (Auk 87:522–536, 1970) describes a yearling helper, believed to be a male, feeding young and carrying fecal sacs at the nest of his mother who was mated to a different male. In that case the new male titmouse attempted to drive off the helper.

Because both Yellow's mother and the male titmouse tolerated Yellow, I believe that both adults of the nesting pair in 1980 were Yellow's parents in 1979. Instances of Tufted Titmice retaining the same mates for 3 years are known (Middleton, Bird-Banding 20: 151–152, 1949). That Green has been a permanent resident of the area since 1977 is also indicated by his capture 15 times during 1977–1982. Yellow appears to have been an unmated yearling helper of unknown sex assisting its mother, and possibly both parents, with the next year's brood.

I thank David Pitts for his interest and suggestions in preparation of this note.—ANN T. TARBELL, 6033 Sherwood Drive, Nashville, Tennessee 37215. Received 26 Mar. 1982; accepted 15 Nov. 1982.