severe icing did occur on Mallard (Anas platyrhynchos) nasal markers during sub-freezing weather, most individuals were able to de-ice the saddles.—Robert M. Alison, Ontario Ministry of Natural Resources, Wildlife Branch, Whitney Block, Queen's Park Cres., Toronto, Ontario M7A 1W9, Canada. Received 15 November 1974, accepted 8 April 1975.

A Blue Jay in captivity for 18 years.—In midsummer of 1956 Mr. and Mrs. Wilbert Selves parked their car in a driveway in Sarnia, Ontario with a window open. When a Blue Jay (Cyanocitta cristata) flew into the car they decided to keep it and brought it to their farm home at Hensall, Huron County.

They have had the bird there ever since.

On 2 November 1974 I examined the bird. It was in full adult plumage, active, in good health, and frequently gave the typical jay squawking call. The left eye was slightly clouded. Mrs. Selves reported that this condition had appeared about a year earlier and that its sight in that eye now seemed to be subnormal.

Since its capture the jay has been kept in a cage 23 x 13 x 10 inches. It has been given a variety of foods, including canned cat- and dogfood, raw egg, peeled potatoes, biscuits, soda crackers, earthworms, grapes, lettuce, apples, shelled sunflower seeds, flies, and other insects. Water is available ad libitum. When the water level gets low the bird puts solid objects such as bits of food and trash into

the water to raise the level to within its reach.

When the bird is given an occasional ant, it picks up the ant in its bill, spreads one wing, and scrapes the ant against its lower surface and then repeats the process with the other wing. The bird then commonly eats the ant. This is a case of ''active'' anting as described by Simmons (Feather maintenance. Pp. 278-286 in A new dictionary of birds (A. L. Thomson, Ed.), New York, 1964, McGraw-Hill Book Co.) Simmons particularly refers to the Blue Jay's habit of anointing one wing at a time.

Mrs. Selves reports that the bird is adept at mimicking the mewing of cats and the cawing of crows. In the first few years of its captivity the jay was taken from the cage at times to ride around the house on Mrs. Selves' shoulder. When she was shelling peas the bird picked up the peas and tried to put them back into the empty pods. Apart from these releases within the house the bird has lived continously in the cage for 18 years.

Being caught in 1956 the jay was at least 18 years old by the summer of 1974. Mrs. Selves does not recall any features of the bird when captured that would indicate its age, beyond that when found in the car it could fly well. Having been caught in midsummer it could have been hatched that year.

A captive bird, well fed and sheltered from predators and other adverse features of the environment, can greatly exceed the normal life expectancy of its species in the wild. Middleton (Bird-Banding, 45, 206, 1974) studied the ages of 202 wild Blue Jays trapped and banded in Pennsylvania and showed that most of them lived for 6 years or less and a few of them for more than 6 years. One reached the age of 14½, the maximum longevity for a wild individual reported by Kennard (Bird-Banding, 46: 66,1975)—WILLIAM W. JUDD, Department of Zoology, University of Western Ontario, London, Ontario, Canada. Received 12 March 1975, accepted 8 April 1975.

Longevity of the Brown Noddy.—Despite its abundance and pantropical range, little published information exists on the longevity of the Brown Noddy (Anous stolidus). Woodward (Atoll Research Bull., 164: 280, 1972) reported a maximum known survival of 10 years for Brown Noddies banded as adults on Kure Atoll, Hawaii. Brown Noddies on Manana Island, Oahu, Hawaii (A. s. pileatus), and the Dry Tortugas, Florida (A. s. stolidus), are among the few populations that have been banded over a period long enough to provide quantitative data on longevity. Records of the Bird Banding Laboratory, U.S. Fish and Wildlife Service, show that 2,334 Brown Noddies were banded on Manana from 1938 through 1947 under the permits of G. C. Munro, and 246 were banded on the Dry Tortugas from 1936 through 1941 under various permits. After a lapse from 1948 through 1962 on Manana and from 1942 through 1958 on the Dry Tortugas, banding of Brown Noddies was resumed in both colonies with more than 3,000 banded on Manana from 1963 to date and more than 6,500 banded on the Dry Tortugas from 1959 to date. The more recent banding should

eventually allow detailed analyses of longevity and mortality in these populations. We report here longevity records that resulted from the earlier banding in both colonies.

Twelve of the Brown Noddies banded on Manana before 1948 were recaptured dead or alive before 1960, the longest interval from banding to recapture being 13 years. On 23 May 1972 Brown recaptured on Manana a Brown Noddy (423-30840) that had been banded there as a juvenile on 12 June 1947, and thus was 25 years old. On 12 July 1960 banders on Bush Key, Dry Tortugas, recaptured a Brown Noddy (39-354548) banded there as an adult by G. D. Robinson on 7 June 1939, an interval of 21 years from banding to recapture. The Dry Tortugas individual was at least one year old when banded. Available data indicate that Brown Noddies of the Dry Tortugas population do not breed until they are at least three years old, but many two-year-olds and occasional yearlings frequent the colony area during the nesting season. These subadults are recognizable as such by details of plumage color and molt, but they might be considered adult unless examined closely.

Kennard (Bird-Banding, 46: 63, 1975) gave 7 years, 7 months as the maximum natural longevity of this species. Both of the aged Brown Noddies appeared to be in good physical condition and were evidently breeding. Both incubation patches of the Manana individual were bare of down, and the Dry Tortugas bird was caught as it flew from a nest containing a half-grown juvenile. WILLIAM Y. BROWN, 23 Hudson Street, Cambridge, Massachusetts 02138; and WILLIAM B. ROBERTSON, JR., Everglades National Park, Homestead, Florida 33030. Received 2 March 1975, accepted 8 April 1975.

Dirt-bathing by a Pileated Woodpecker.—Dirt-bathing has not been described for any species of woodpecker as far as I am aware, and Simmons (in A new dictionary of birds, A. L. Thomson (ed.) New York, McGraw Hill, 1964) does not include the Piciformes among birds for which the habit of dusting is known. Therefore the following observations on a male Pileated Woodpecker

(Dryocopus pileatus) are noteworthy.

Near a wooded swamp in Luray, South Carolina, at 1640 on 12 April 1974, I heard the "cuks" of an approaching Pileated Woodpecker. The "cuks" continued for 3 min as a male Pileated flew to the base of a tree and paused to look about. It then moved to a mound of clay-like earth, 30 cm in height, thrown up where a pit had been dug some years previously, settling down in a scooped out place with motions like a hen settling on a nest. Its back was toward my wife and me. With body feathers fluffed and wings held slightly out, the Pileated poked its bill repeatedly in a small, hollowed bank of earth in front of it, while continually raising its head to look around. Some dirt was thrown onto its back, perhaps by accident. The Pileated made no effort to tuck dirt into its plumage, as it might have done in anting. After 3 to 4 min it flew to a nearby tree with some dirt falling from its plumage.

The dirt of the mound was damp except for a thin outer crust. Little sun penetrated through the woods, thus making it unlikely that the mound could have ever become dry enough to be dusty. The place where the Pileated settled, hollowed to a depth of about 8 cm at the end adjacent to the center of the mound, looked as though it had been used many times before - - s at this end that I saw marks made as the Pileated had driven its bili repeatedly into the earth.

There were no signs of ants or other insects.

It rained hard on the following day. On the day after, at 0940 and again at 1637 (almost exactly the time of its afternoon visit on 12 April) I heard "cuks" and saw the male Pileated come to the dirt pile. On each occasion it jabbed the earth only 4 to 5 times, then flew off. The earth was still soaking wet, and I presumed that the Pileated no longer found it suitable.

Because much of what Simmons (op. cit.) states about dusting applies well to what we observed for the Pileated Woodpecker, there is no need to repeat it

here. My feeling is that body and feather parasites of woodpeckers, as presumably is true for many other birds, have breeding cycles that synchronize with those of their hosts, as indicated by the greatly increased amounts of preening and scratching done by all woodpeckers that I have studied. It is conceivable that dirt bathing may be related to increased activity of parasites. Contact with dirt could act both to alleviate irritation directly and, if parasites were on the move, as a way of removing at least some of them. What seems unusual is that whereas