At Audubon Canyon Ranch in 1971, similar interruptions in Great Blue Heron incubation were followed by desertion (Pratt 1972). Millstein et al. (1970) saw a male Grey Heron that also stood without incubating the eggs and apparently broke them by stabbing them with his bill. They suggest that there may be a connection between abnormal parental behavior and high levels of pesticides in the breeding birds. Lowered blood level of estradiol has been demonstrated for birds on dosage of DDT (Peakall 1970), and Jefferies (1967) reported that a male Bengalese Finch on dosage of DDT removed the young from the nest and dropped them on the floor of the cage. Both Grey Herons and Great Blue Herons have been found to accumulate high levels of chlorinated hydrocarbons (Prestt 1969, Vermeer and Reynolds 1970). It seems possible that cessation of incubation before completion of the incubation period might result if the normal sex hormone balance were disturbed. Evaluation of this possibility awaits further study on the relationship between high pesticide levels and breeding behavior of birds.

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LITERATURE CITED

- Bent, A. C. 1926. Life histories of North American marsh birds. U. S. Natl. Mus. Bull. 135.
- Gross, A. O. 1923. The Black-crowned Night Heron (Nycticorax nycticorax naevius) of Sandy Neck. Auk 40: 191-214.
- JEFFERIES, D. J. 1967. The delay in ovulation produced by pp'-DDT and its possible significance in the field. Ibis 109: 266-272.
- MILLSTEIN, P. LES., I. PRESTT, AND A. A. BELL. 1970. The breeding cycle of the Grey Heron. Ardea 58: 171-254.
- Owen, D. F. 1959. Some aspects of the behaviour of immature herons, Ardea cinerea, in the breeding season. Ardea 47: 187-191.
- PALMER, R. S. 1962. Handbook of North American birds, vol. 1. New Haven, Connecticut, Yale Univ. Press.
- PEAKALL, D. B. 1970. p,p'-DDT: effect on calcium metabolism and concentration of estradiol in the blood. Science 168: 592-594.
- Pratt, H. M. 1970. Breeding biology of Great Blue Herons and Common Egrets in central California. Condor 72: 407-416.
- Pratt, H. M. 1972. Nesting success of Great Blue Herons and Common Egrets at Audubon Canyon Ranch in 1971. Amer. Birds 26: 699-702.
- Prestr, I. 1969. Organochlorine pollution of rivers and the heron (Ardea cinerea L.). Papers and proceedings, IUCN technical meeting, vol. 1. Morges, Switzerland.
- Vermeer, K., and L. M. Reynolds. 1970. Organochlorine residues in aquatic birds in the Canadian Provinces. Canadian Field-Naturalist 84: 117-130.
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Diurnal sleep rhythm of a young Barred Owl.—The Barred Owl, Strix varia, is said to be "a forest-loving bird . . . but when its haunts are invaded, it is not caught napping" (Bent 1938, U. S. Natl. Mus. Bull. 170, part 2: 182). Unexpectedly we had an opportunity to determine how much of its time a

Barred Owl did spend napping. We were presented with a supposedly orphaned Barred Owl that was 5 or 6 weeks old on 23 July 1972. The owl accepted us as foster parents, spent its days outdoors, and was trained to come to the glove as in falconry. The bird became importunate when hungry and ignored our presence at other times.

On 22 August Janick spent a dawn-to-dusk day with the owl. As the owl was accustomed to being fed sometime in the morning, it solicited food for a short time and then soon appeared to realize that, as Janick was not wearing a glove, no food was forthcoming. The owl seemed to ignore his presence thereafter. It was not fed.

 $\begin{tabular}{ll} TABLE 1 \\ Diurnal Sleep Rhythm of a Young Barred Owl 1 \\ \end{tabular}$

Hours	Minutes						Percent
	10	20	30	40	50	60	asleep
05:00							
06:00							0
07:00	##ZZZZZZ	ZZZZZZZZ	zzzzzzzzz	Z <i>########</i>	####ZZZZZZ	####	53
08:00	#####Z##########	!###	##-##	-##-####			2
09:00		##	####				0
10:00	#####ZZZ##-	ZZ####	##zz		-####ZZZZZ-		20
11:00	##				zz	ZZZZ	10
12:00	ZZZZZZZZZZ#####	.zz##zzz##	##ZZZZZZZZ	zzzzzzzz	ZZZZZZZZZ-	##	73
13:00	###Z	.z##		z	zzz		10
14:00	####	##ZZZZ 	ZZZZZZZZZ	zzzzzzzzz	zzzzzzzzz-	zz	60
15:00	ZZZZZZZZZZZ	zzzzzzzz	zzzzzzzz	-	zzzzzzzzz -		82
16:00					ZZ##	#-ZZ	7
17:00	###ZZZZZZZZZZZZZZ	.zzzzzzzz-	#####ZZZZZ	#	##########	####	43
18:00	########	!##					0
19:00	##2	.zzzzz##zz	ZZZZZZ##ZZ	ZZ##	#		30
20:00							

¹ ZZZZ = sleeping, #### = dozing, ---- = awake, blank = no data (too dark).

Table 1 presents the diurnal sleep rhythm during the time it was light enough to watch the bird, from 05:25 to 20:04. We assumed that the bird slept when its eyes were closed and it remained motionless. When dozing its eyes were partly closed. Table 1 shows the relationship between sleep and dozing. Light and intermittent rain fell from 16:10 to 17:04; during this period the owl stayed awake almost as long as it had in the early morning. It was cloudy a good part of the day. By nightfall the temperature was 60° F.

The owl was wakened three times by noisy vehicles, once by a plane, and once by young Marsh Hawks, *Circus cyaneus*, but we found no suggestion of disturbance to explain the other 18 awakenings.

This owl catnapped throughout much of the day—a pattern that may well be normal in the wild.—Frances Hamerstrom, University of Wisconsin/Stevens Point, Plainfield, Wisconsin 54966, and Keith Janick, 12009 West Dearborn, Wauwatosa, Wisconsin 53226. Accepted 3 Jan. 73.