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 A THREE NEST, HUMANLY DISTURBED GREAT BLUE HERON COLONY ALONG THE WILLAMETTE RIVER, LINN COUNTY  
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ABSTRACT.--There were 21 days with observations during 30 January-21 May 1974. Herons were already displaying on January 30, so nesting activity can occur much earlier than has been supposed. A yearling was often seen at the nests, but most nesting activity was by adults. Although eggs were laid in at least one nest, no nest appeared to have been successful. The nesting failure may have resulted from human disturbance.

#### A. INTRODUCTION

Butler (1992) reviews much of the life history of Great Blue Herons (*Ardea herodias*)(henceforth termed herons), and there have been several studies of heron nesting in Oregon (Henny and Bethers 1971, Nehls 1972, Werschkul et al. 1976, 1977; English 1978, Henny and Kurtz 1978, Blus et al. 1980, Bayer 1981, 1982; Bayer and McMahon 1981, Horvath and Moholt 1986, Trowbridge and Bayer 1990, Llewellyn and Bayer 1994:171).

However, with the exception of Trowbridge and Bayer (1990), most Oregon studies were for colonies with more than 10 nests that were first studied in March or later. In this article, I examine observations at a small colony and document heron activity in late January.

#### B. STUDY AREA

Location: Township 12S, Range 5W, NE 1/4 of Section 2  
 Area Studied: <1 ac (<0.4 ha)  
 Habitat(s) Studied: Riparian Forest  
 Elevation: about 200-300 ft (61-91 m).

This small colony was located on the east bank of the Willamette River less than 0.5 mi (0.8 km) north of where the Mary's River flowed in. It was approximately in a line east across the River from Washington Avenue in Corvallis, Benton County. Within a few hundred feet of the east side of the colony was a farm field on which crops were raised.

This colony was not listed in Nehls (1972), but because of its small size it could have been easily overlooked. I observed heron activity at this colony in 1973, and it may have been active before then.

In 1974, there were three nests in a single black cottonwood (*Populus trichocarpa*). Nest #1 was above both nest #2 and nest #3. Nests #2 and #3 were in the forks of the same branch with nest #2 slightly higher than nest #3.

In 1975, English (1978) conducted a survey of heron colonies along the Willamette River and found two active nests in a colony (which he designated as the "Corvallis" colony) that was probably the same colony as reported here. English (1978) reported that this colony was in a single 74 ft (23 m) high black cottonwood.

#### C. METHODS

I made my observations from a wooden deck for pedestrians along a paved bicycle/jogging/walking trail along the west bank of the Willamette River. I observed the nests across the River with a 20x telescope, but I could not see into the nests because I roughly estimated that they were at least 20 ft (6 m) higher than I. Although I sometimes noted and recorded displays described by Mock (1976) and Edford (1976), I generally only noted the presence or absence of herons at each of the nests.

In total, I made about 44 hr of observations during 21 days; most were in the afternoon during weekdays (Table 1).

I visited the colony site on March 9 and May 11 (Table 2), and I looked for eggshells or dead herons under the colony on both visits.

#### D. SHORTCOMINGS

##### D-1. SHORTCOMING: INADEQUACY OF OBSERVATIONS

Since herons were already displaying during my first visit on January 30 (Table 2), I should have started observing earlier to tell when heron

activity began at this colony.

Because most of my observations were in the afternoon during the week (Table 1), I may have missed heron activity in the morning or evening or missed human disturbances that may have been more prevalent on weekends.

Unfortunately, I did not have any observations between April 17 when at least one nest was active and May 11 when the colony had been abandoned (Tables 1 and 2). Perhaps if I had made more observations during that interval I could have discovered the cause of the abandonment.

#### D-2. SHORTCOMING: POOR OBSERVATION SITE

I could not look into nests to see if there were eggs or chicks, and this is important to determine. Because there wasn't an observation point on the ground where I could see any better, I should have considered climbing a tree along the west bank of the river for a clearer view. Henny and Bethers (1971) and English (1978) climbed nest trees to determine nesting activity, but such disturbance by researchers could adversely affect nesting success or cause colony abandonment if done too early or too late in the nesting cycle.

#### D-3. SHORTCOMING: INADEQUATE SITE INFORMATION

More information about the colony site would be useful in establishing guidelines for reducing disturbance. For example, analysis of an aerial photograph could determine the placement of surrounding trees and land use. During the nonbreeding season, measurements of the distance between the nesting tree and the river or farm field would also have been informative.

#### E. RESULTS AND DISCUSSION

##### E-1. NUMBER OF NESTS

A researcher's measurement of the number of nests in a heron colony depends upon when the researcher observes the colony and the arbitrary criterion used in counting nests. During most of my January-April observations, there was heron activity in 1-2 nests at a time (Table 2), so a researcher observing the colony only once or twice could class this as a one or two nest colony. But taking all my observations together, herons were active at each of the three nests (Table 2), so I classify this as a three nest colony in 1974, which is the same number of nests as was physically left from 1973 at the start of my observations.

##### E-2. TIMING OF NESTING

The timing of Great Blue Heron egg-laying can vary markedly among years (English 1978:240-241, Pratt and Winkler 1985), so the commencement of nesting events prior to egg-laying may also vary annually.

At this colony, more daily observations, particularly in January and February, would have been necessary to establish actual first dates of nesting events, so I can only report the dates for my few observations, which may have occurred several days or weeks after the events first occurred. I first saw a heron giving courtship displays on January 30, I first noticed two herons together in a nest on February 13, and I saw the first copulation on March 8 (Table 2). Although I saw several instances of what I term "false incubation" earlier (see section E-4), the first consistent incubation seemed to occur on March 20 (Table 2).

Elsewhere in Oregon, researchers have rarely observed heron colonies in the early breeding season and have often depended upon hatching dates to backdate when the nesting season must have started. Exceptionally, herons were noted at a 1-3 nest coastal colony as early as January 28 and regularly in early February (Trowbridge and Bayer 1990), so my observation of a displaying heron on January 30 is not an anomaly.

At a heron colony a few miles downstream on the Willamette River, Henny and Bethers (1971) found that hatching had occurred at more than half of the nests at a 55 nest colony on 11 April 1970 and, by backdating, estimated that incubation probably began about March 4; they noted that most young were ready to fly by May 2. In contrast, English (1978:240) noted that 52% of nests at another Willamette River colony still contained eggs on May 4, so there is marked yearly variation in the timing of heron nesting along the Willamette River.

##### E-3. TEMPORARY COLONY ABANDONMENT IN THE EARLY NESTING SEASON

Although up to four herons were present at a time on January 30, none were seen during several observations on February 6 and 8 and March 10 and 11 (Table 2). This is an important finding because it means that a single visit to a colony early in the nesting season may give a misleading idea as to whether or not a colony is active. This may be particularly true for small colonies where the absence of even a few herons can make a colony appear abandoned.

**E-4. FALSE INCUBATION**

During several observations, a heron appeared to be incubating, since it was laying down in a nest. Herons at nest #1 sometimes adopted an incubation posture as early as February 20, but there probably were not any eggs present, since no incubation was noted at this nest on later dates (Table 2). Probable incubation of eggs was noted on March 20 and was distinguished by a heron periodically standing and appearing to move the eggs with its bill and by long bouts of a heron remaining in the incubation posture. Thus, researchers need to be cognizant that herons appearing to incubate may not have any eggs.

**E-5. AGE OF NESTING HERONS**

Butler (1992:11, 14) noted that yearling Great Blue Herons sometimes attempted to breed but that most herons appear to breed when they are about two years or older and can be distinguished by, among other things, white feathers on their crown.

I saw a yearling at this colony on March 11 and May 11 and 21, but I never a yearling with any other heron in a nest (Table 2). On May 11 and 21, a yearling appeared to be incubating or brooding small young that were not visible above the rim of the nest (Table 2), but even if it was, this seems late as Henny and Bethers (1971) noted that most young were large enough to be out on branches and nearly ready to fly on May 2, although English (1978:240) noted that 52% of nests still contained eggs on May 4. Perhaps, the yearling was incubating eggs abandoned by an adult.

**E-6. PROBABLE COLONY NESTING FAILURE IN 1974**

Heron displayed from each nest, but copulating herons were only noted at nest #2 (Table 2). During my visit to the colony site on May 11, I found one piece of a heron eggshell on the ground, so eggs were laid in at least one nest. A yearling appeared to be either incubating or brooding very small young on May 21, but it seems doubtful that any young would have fledged here because they would have fledged very late and a yearling might not have been experienced enough to fledge young. In any case, as of May 21, no young were visible above the rim of any nest, so nesting at this colony appears unsuccessful in 1974.

In 1975, English (1978) noted herons in two nests at what appears to be the same colony, so this colony does not seem to have been totally abandoned. Similarly, a small coastal colony was abandoned one year and fledged young the following year (Trowbridge and Bayer 1990).

**E-7. HUMAN DISTURBANCE**

It is unclear why nesting, adult herons abandoned this colony in 1974. Perhaps, it was because the colony was too small, and/or it may have been a result of human disturbances.

It is certain that these herons were disturbed by humans, but the disturbances I observed did not prevent adult herons from incubating at two nests through at least April 17. I observed boats pass by on February 6 and March 10, and the herons were clearly affected by the March 10 passage (Table 2). I also saw a man walking on the east river bank near the colony on February 6 (Table 2); the same day, just my movement in the observation deck across the river from the colony appeared to cause a heron to fly (Table 2).

Researchers can often be a source of disturbance to nesting birds, but, with care, the disturbance may not be significant. The herons may have become habituated to pedestrians, joggers, bicyclists, and motor traffic near my observation point better than my presence and my focussed attention in watching the herons.

My visit to the colony site on March 9 was also a source of disturbance, but I do not think my May 11 visit was a disturbance because adult herons had already abandoned nesting by that time (Table 2). I seriously doubt if my single visit and my remote observations caused colony abandonment by May 11; Henny and Bethers (1971) and English (1978) climbed nesting trees in heron colonies along the Willamette River several times during the nesting season, which is far more disturbing, but their colonies were not abandoned and nesting success was good.

Another potential source of disturbance to the colony that I studied could have been farming activity in the field a few hundred feet east of the colony. But during my May 11 visit the farm field appeared unworked, so farming may not have been a factor.

Since adult herons were incubating at two nests on April 17, I suspect that if disturbance caused the colony abandonment that it occurred sometime between April 17 and May 11 and that it must have been very disturbing and/or continuous to have caused incubating adults to abandon nesting. If the herons were shot, the bodies must have been carried away as I did not find any dead herons under the colony on May 11.

**E-8. GUIDELINES FOR PROTECTING HERON COLONIES**

English (1978) discusses several issues concerning the protection of heron colonies along the Willamette River. I only add that protection, if possible, should start in late January. In western Oregon, only Trowbridge and I have looked

for heron activity in late January, and we both found it. I suspect that if more observations were made in January that heron activity would then be found to be common. Protection in the early nesting season is critical because in my experience since 1974 with heron colonies I have found that herons seem to be more easily disturbed then than when they are incubating eggs or rearing young.

But protecting colonies such as the one at Corvallis seems impractical because boat passage or human traffic along the west bank of the river can not be prevented. Unfortunately, there may be little suitable nesting habitat for herons in the Willamette Valley that is totally free of human disturbance sometime during the herons' nesting season.

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F. TABLES

**Table 1.** Days of week, dates, and times of observations in 1974 at a three nest heron colony in a cottonwood along the Willamette River, Linn County. The day of the week was determined with a

perpetual calendar. Times are in Pacific Standard Time by the 24 hour clock (i.e., 1200 is added to afternoon times, so 1 PM=1300 and 2:30 PM=1430).

Day of Week	1974 Date	Observation Time(s) (Pacific Standard Time)	Duration (hrs)
Wednesday	Jan 30	0815-1200	3.8
Wednesday	Feb 6	1315-1445	1.5
Friday	Feb 8	1300-1315	0.3
Wednesday	Feb 13	1130-1230	1.0
Friday	Feb 15	1345-1415	0.5
Wednesday	Feb 20	1300-1430	1.5
Thursday	Feb 21	1300-1305, 1500-1505, 1800-1805	0.3
Friday	Feb 22	0845-0930	0.8
Wednesday	Feb 27	1430-1435	0.1
Friday	March 1	0830-0835	0.1
Wednesday	March 6	0800-0950, 1800-1930	3.3
Thursday	March 7	1630-1635	0.1
Friday	March 8	1240-1400, 1810-1945	2.9
Saturday	March 9	0930-0935	0.1
Sunday	March 10	1015-1615, 1750-1945	7.9
Monday	March 11	0800-1215, 1330-1730, 1840-1945	9.4
Wednesday	March 20	1130-1540, 1715-1720, 1835-1930	5.2
Wednesday	March 27	1230-1235, 1400-1405	0.2
Wednesday	April 17	1415-1420	0.1
Saturday	May 11	0930-1300, 1640-1645, 1840-1845	3.7
Tuesday	May 21	1630-1635, 1740-1820	0.8

TOTAL 43.6 hrs

**Table 2.** Number of Great Blue Herons at nest 1 (#1), nest 2 (#2), or nest 3 (#3) in a three nest colony in a cottonwood along the Willamette River, Linn County in 1974. Remarks have only been included if they seemed particularly noteworthy; all human disturbances are included. All copulations seen are listed but bouts of displaying and "incubation" are not always listed; display names are capitalized and follow

Mock (1976). I never saw any chicks standing above the rim of any nest.

INC=heron sitting in nest as if incubating; eggs may or may not have been present. "Other" refers to herons perched in the nesting tree or in adjacent trees away from the three nests. PST=Pacific Standard Time by the 24 hour clock (i.e., 1200 is added to times afternoon times, so 1 PM=1300 and 2:30 PM=1430).

Date	PST Time	No. of Herons....				Remarks
		#1	#2	#3	Other	
1/30/74	0815	0	0	0	0	
"	0845	1	1	0	0	*
"	0900	1	1	0	0	*
"	0915	1	1	0	0	
"	0930	1	1	0	1	*
"	0945	1	1	0	2	*
"	1000	1	1	0	1	*
"	1015	1	0	0	0	
"	1030	1	0	0	0	
"	1045	1	0	0	0	
"	1100	1	0	0	0	
"	1115	1	0	0	0	*
"	1130	1	0	0	1	*
"	1145	1	0	0	1	*
"	1200	1	0	0	1	
* Displays of heron at nest #2 included Stretch, Snap, Circle Flight, Crest Raising, and Twig Shake.						
2/6/74	1315	0	0	0	0	
"	1330	0	0	0	0	
"	1345	0	0	0	0	
"	1400	0	0	0	0	
"	1410	0	0	0	1	A heron landed near nests, but, when I moved at my position across the river, it flew away.
"	1417	0	0	0	0	A man in a small boat with an outboard engine goes by, but there are no herons in the colony to disturb.
"	1430	0	0	0	0	A man is walking around on the opposite bank, about 100 ft from the nest tree, but there are no herons in the colony to disturb.
"	1445	0	0	0	0	
2/8/74	1300	0	0	0	0	
"	1315	0	0	0	0	
2/13/74	1130	0	1	0	0	No displays
"	1145	0	1	0	0	No displays
"	1200	0	1	0	0	No displays
"	1215	0	1	0	1	Stretch display
"	1230	2	1	0	1	Mutual Bill Clapping and Bill Duels in #1, but no copulation and no INC.
2/15/74	1345	0	1	0	0	No INC, no displays
"	1400	0	1	0	0	No INC, no displays
"	1415	0	1	0	0	No INC, no displays

Date	PST Time	No. of Herons....				Remarks
		#1	#2	#3	Other	
2/20/74	1300	1	1	0	0	No INC, no displays
"	1315	1	1	0	0	No INC, no displays
"	1330	1	1	0	0	No INC, no displays
"	1345	1	1	0	0	INC at #1
"	1400	1	1	0	0	Bill Snap at #1
"	1415	1	1	0	0	
"	1430	1	1	0	0	INC at #1
2/21/74	1300	1	0	0	1	No INC, no displays
"	1500	1	0	0	1	INC at #1 & Stretch display
"	1800	1	1	0	0	No INC, no displays
2/22/74	0845	1	1	0	1	No INC, no displays
"	0900	1	2	0	1	No INC, no displays
"	0915	1	2	0	0	No INC, no displays
"	0930	1	2	0	0	No INC, no displays
2/27/74	1430	0	0	0	1	No displays
3/1/74	0830	0	1	0	0	No INC, no displays
3/6/74	0800	1	1	0	0	No INC, no displays
"	0815	1	1	0	0	
"	0830	0	1	0	0	No INC *
"	0845	1	1	0	0	No INC *
"	0900	1	1	0	0	No INC *
"	0915	1	1	0	1	No INC *
"	0930	1	1	0	3	No INC
"	0945	1	1	0	1	No INC
"	1800	1	1	0	0	INC at #2
"	1815	1	1	0	1	No INC
"	1830	1	1	0	1	
"	1845	1	1	0	1	No INC
"	1900	0	1	0	0	No INC
"	1912	0	1	0	0	INC at #2
"	1920	0	1	0	0	No INC
"	1930	0	1	0	0	No INC
* Stretch and/or Bill Snap displays.						
3/7/74	1630	1	1	0	0	No INC, no displays

Date	PST Time	No. of Herons....				Remarks
		#1	#2	#3	Other	
3/8/74	1240	0	1	0	0	No INC, no displays
"	1242	0	1	0	0	Stretch display
"	1300	0	1	0	0	INC at #2
"	1315	0	1	0	0	INC at #2
"	1330	0	0	0	0	
"	1345	0	0	0	0	
"	1400	0	0	0	0	
"	1810	0	1	0	0	No INC
"	1830	0	1	0	0	No INC
"	1845	1	2	0	0	Heron at #2 copulate and do Bill Clapping, Bill Snap, and Stretch displays.
"	1900	0	2	0	0	No INC
"	1905	0	2	0	0	Heron flies from #2 to #1 and removes twig from nest, flies with it back to #2, and gives it to mate. This repeated at 1907, 1909, and 1911.
"	1915	1	2	0	0	Heron arrives at #1 and gives Stretch display; pair in #2 Bill Duel.
"	1930	1	2	0	0	No INC
"	1945	1	2	1	0	No INC, no displays
3/9/74	0930	1	1	0	1	INC at #2
"	1010	I walk under colony, and a heron that had been at one of the nests is disturbed and flies away.				
3/10/74	1015	0	0	0	0	#1 nest is now noticeably smaller than other nests; #2 larger than #3. Herons have evidently stolen branches from nearby nests.
"	1030	0	0	0	0	
"	1045	0	1	0	0	No INC
"	1100	0	0	0	0	
"	1115	0	0	0	0	
"	1130	0	0	0	0	
"	1145	0	0	0	1	
"	1200	0	0	0	0	
"	1215	0	0	0	0	
"	1230	0	0	0	0	
"	1245	0	0	0	0	
"	1300	0	1	0	0	No INC
"	1315	0	0	0	0	
"	1330	0	0	0	0	
"	1345	0	0	0	0	
"	1400	0	0	0	0	
"	1412	0	2	0	0	Pair copulates at #2; also Bill Duel, Stretch display, Bill Snap, and Bill Clapping.
"	1430	1	1	0	0	No INC
"	1445	1	1	0	0	No INC
"	1456	1	0	0	0	As outboard motorboat passes, heron in #2 leaves, and heron in #1 assumes the Tall Alert posture until after the boat passes.
"	1500	1	0	0	0	

(3/10/74 continued in next column)

Date	PST Time	No. of Herons....				Remarks
		#1	#2	#3	Other	
(3/10/74 continued)						
"	1515	1	2	0	0	Pair in #2 display but do not copulate; no INC.
"	1530	1	1	0	0	No INC
"	1545	1	1	0	0	No INC
"	1600	1	1	0	0	No INC
"	1615	1	1	0	0	No INC
"	1750	1	1	0	0	No INC
"	1800	1	1	0	0	Displays
"	1815	1	1	0	0	
"	1830	1	1	0	0	No INC
"	1845	1	1	1	1	Displays; no INC
"	1900	1	1	0	0	No INC
"	1915	1	1	0	0	No INC
"	1930	1	1	0	1	No INC
"	1945	1	1	0	2	No INC
3/11/74	0800	0	1	0	1	INC at #2; heron away from nest is a yearling; the top of its head is gray (no white), and its upper mandible is dark colored.
"	0815	1	1	0	0	Yearling flies from nearby branch into #1 and starts arranging twigs in nest. #2 not INC.
"	0817	1	1	0	0	INC at #2; yearling flies away at 0819.
"	0830	0	1	0	0	No INC
"	0845	0	1	0	0	No INC
"	0900	0	1	0	0	No INC
"	0915	0	1	0	0	No INC
"	0930	1	1	0	0	Adult now at #1
"	0945	1	1	0	0	
"	1000	1	1	0	0	
"	1015	1	1	0	0	No INC
"	1030	1	1	0	0	No INC
"	1045	1	1	0	2	Adult at #1 gives Stretch and Bill Snap displays.
"	1049	0	0	0	0	No apparent reason why the herons departed.
"	1055	1	1	0	3	Five herons fly in together and land with displays.
"	1100	1	1	0	2	No INC
"	1115	0	1	0	1	No INC
"	1130	0	1	0	1	No INC
"	1145	0	1	0	1	No INC
"	1200	0	1	0	1	No INC
"	1215	0	1	0	1	No INC
"	1330	0	1	0	1	No INC
"	1345	0	1	0	0	No INC
"	1400	0	1	0	0	No INC
"	1415	0	1	0	0	No INC
"	1430	0	0	0	0	
"	1445	0	0	0	0	
"	1500	0	0	0	0	
"	1515	0	0	0	0	
"	1530	1	0	0	0	
"	1545	0	0	0	0	

(3/11/74 continued on next page)

Date	PST Time	No. of Herons....				Remarks
		#1	#2	#3	Other	
(3/11/74 continued)						
"	1600	0	0	0	0	
"	1615	0	0	0	0	
"	1630	0	0	0	0	
"	1645	0	0	0	0	
"	1700	1	2	0	1	Bird not in a nest is a yearling that arrived at 1659 and left at 1705. Pair at #2 displays but do not copulate.
"	1715	0	0	0	0	
"	1730	0	0	0	0	
"	1845	0	0	0	0	
"	1900	0	0	0	0	
"	1915	0	1	0	0	
"	1916	1	1	0	0	Displays at #1
"	1930	1	2	0	0	
"	1945	1	2	0	1	
3/20/74	1130	0	1	1	0	Nest #1 is now very small, but nests #2 & #3 are big and thick.
"	1145	0	1	1	0	
"	1200	0	0	1	0	
"	1215	0	1	1	0	INC at #2
"	1230	0	1	1	0	INC at #2
"	1245	0	1	1	0	INC at #2
"	1300	0	1	1	0	INC at #2
"	1315	0	1	0	0	INC at #2
"	1330	0	1	0	0	INC at #2
"	1345	0	1	0	0	INC at #2
"	1400	0	1	0	0	INC at #2
"	1415	0	1	0	0	INC at #2
"	1430	0	1	0	0	No INC
"	1445	0	1	0	0	
"	1500	0	1	0	0	No INC
"	1515	0	1	0	0	No INC
"	1530	0	1	0	0	No INC
"	1540	0	1	0	0	No INC
"	1715	0	1	0	0	INC at #2
"	1835	0	1	0	0	INC at #2; it appears to roll something in nest as if it was rotating eggs.
"	1845	0	1	0	0	
"	1905	1	1	0	0	#2 acts as if it is moving eggs with its bill; #1 displays.
"	1915	0	1	0	0	
"	1930	0	1	1	0	
3/27/74	1230	1	1	2	0	#2 INC, nest #1 very small; cottonwoods starting to leaf out; it may be difficult to see nests in future.
"	1400	2	1	1	1	#2 INC
4/17/74	1415	0	1	1	0	#2 INC; #3 INC; #1 nest disappeared.

Date	PST Time	No. of Herons....				Remarks
		#1	#2	#3	Other	
5/11/74	0930	0	1	0	0	Yearling in #2 appears to be brooding young or INC; it has all gray cap and dark colored upper mandible.
"	1015	0	1	0	0	Yearling in #2
"	1115	0	1	0	0	Yearling in #2
"	1130	0	1	0	0	Yearling in #2
"	1145	0	1	0	0	Yearling in #2
"	1200	0	1	0	0	Yearling in #2
"	1230	0	1	0	0	Yearling in #2
"	1300	0	1	0	0	Yearling in #2
"	1640	0	1	0	0	Yearling in #2
"	1700-1740 I walk underneath colony, and a heron at one of the nests flies away as I do so. I only find a piece of one heron's eggshell and no dead herons.					
"	1840	0	1	0	0	Yearling in #2
5/21/74	1630	0	1	0	0	#2 yearling appears to be brooding young or INC. If young were present, they were so small that they were not visible above the rim of the nest.
"	1745	0	1	0	0	Yearling in #2
"	1800	0	1	0	0	Yearling in #2
"	1815	0	1	0	0	Yearling in #2

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