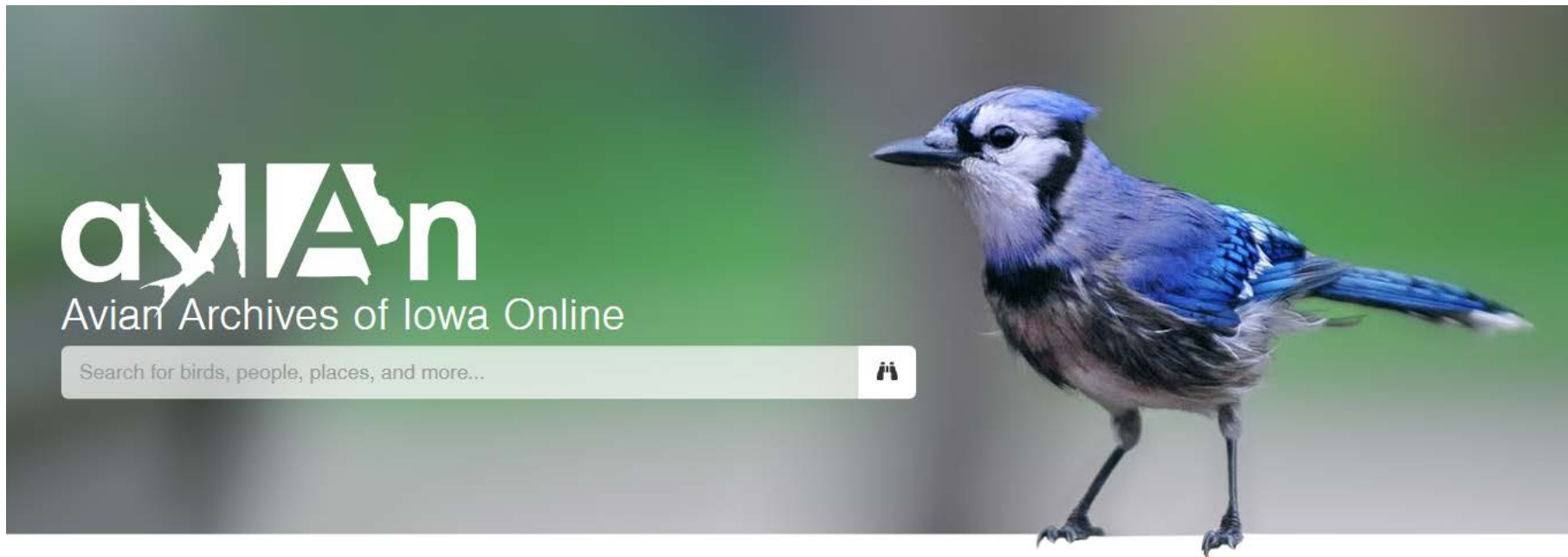


# The *avIAn* Archives of Iowa & Frederic Leopold



<https://avian.lib.iastate.edu/>

Anita Kay (presenter) & Erin Anderson (Project Coordinator)  
Iowa State University  
Parks Library

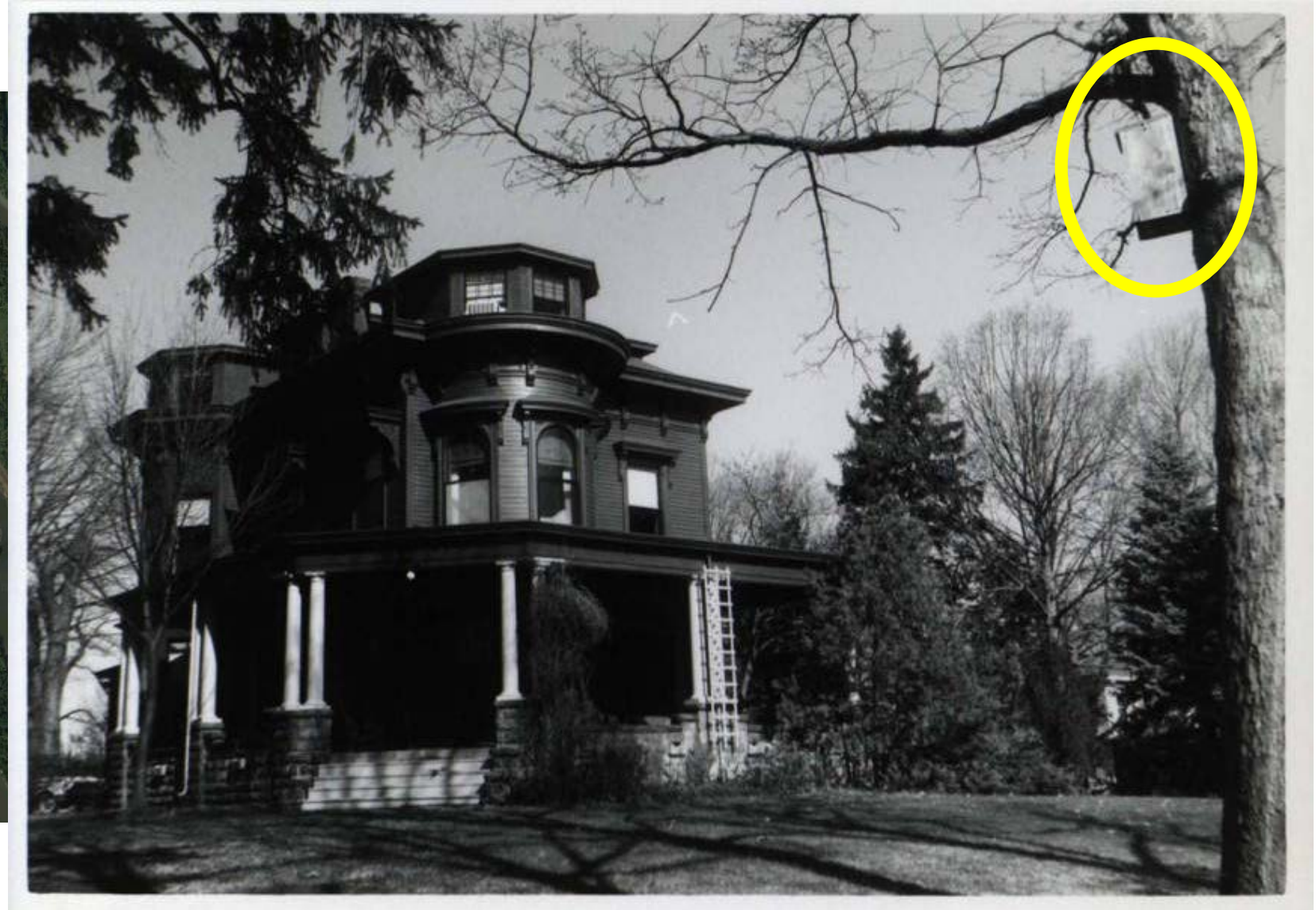
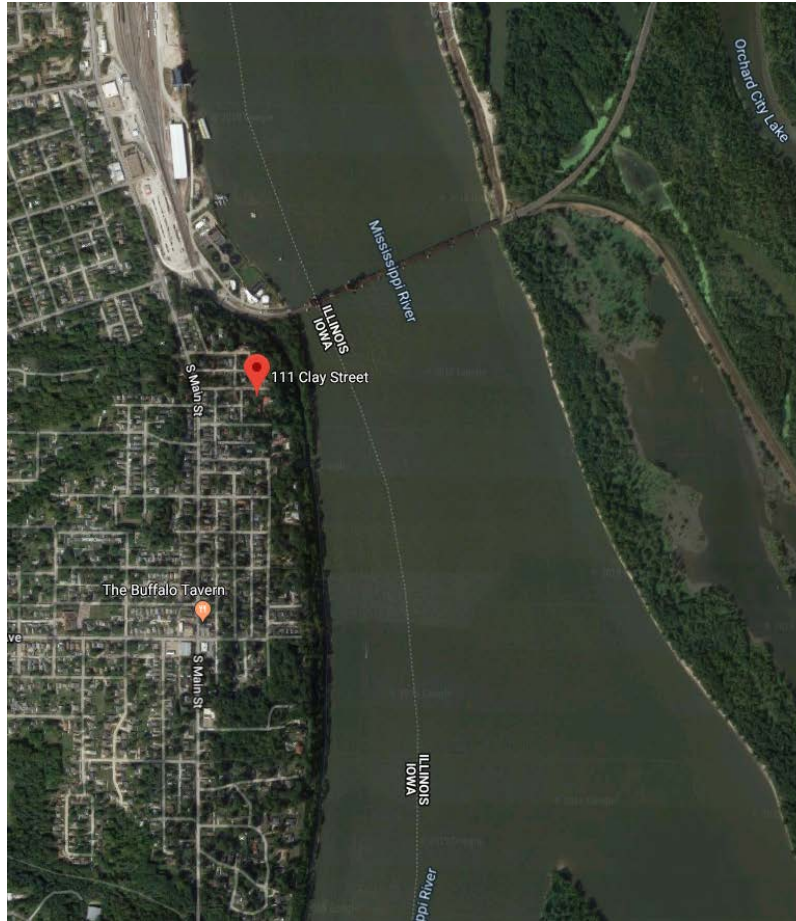
# Frederic Leopold (1895 – 1989) of Burlington, Iowa

- Ran the family's business
- Studied wood duck nesting
- His property and nesting boxes resulted in ~ 5,000 hatchlings





# Frederic's Home Burlington, Iowa





# Wood Duck Management and Research Symposium, December 8-9, 1965

## EXPERIENCES WITH HOME GROWN WOOD DUCKS

I was pleased to have a telephone call several months ago from Art Hawkins offering me an opportunity to join you here and to tell you something of my project involving nesting Wood Ducks. In fact, it was Art and later Frank Bellrose, who got me started in this hobby back about 1938 or 1939. Time is short so I won't reminisce but I have enjoyed the experience.

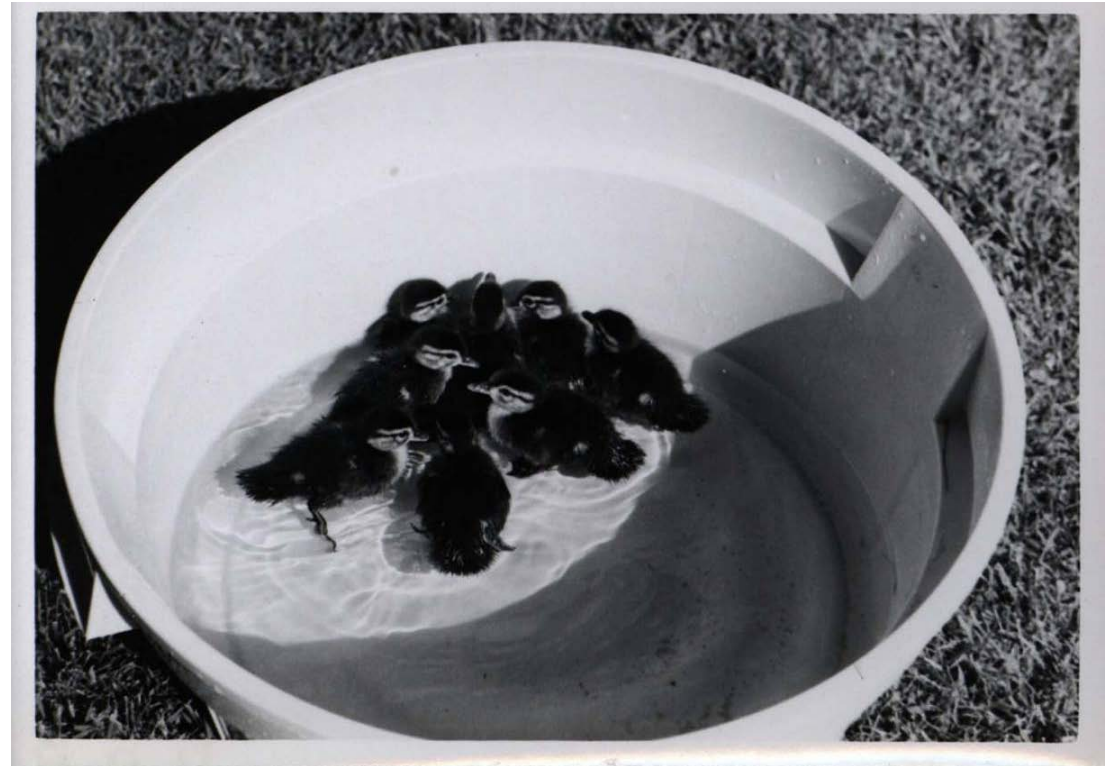
In the beginning I, of course, knew nothing about the subject and my tutors still had much to learn too.

My operating area comprises about a square block of town property located on a steep bluff rising about 120 feet above the main channel of the Mississippi. The ducks come here only for nesting purposes, there being no marsh or feeding or loafing water on my side of the river.

Across the channel a half mile or more away in Illinois, there is wild swamp land and timber where the birds live, feed and probably have their territories and rear their young.

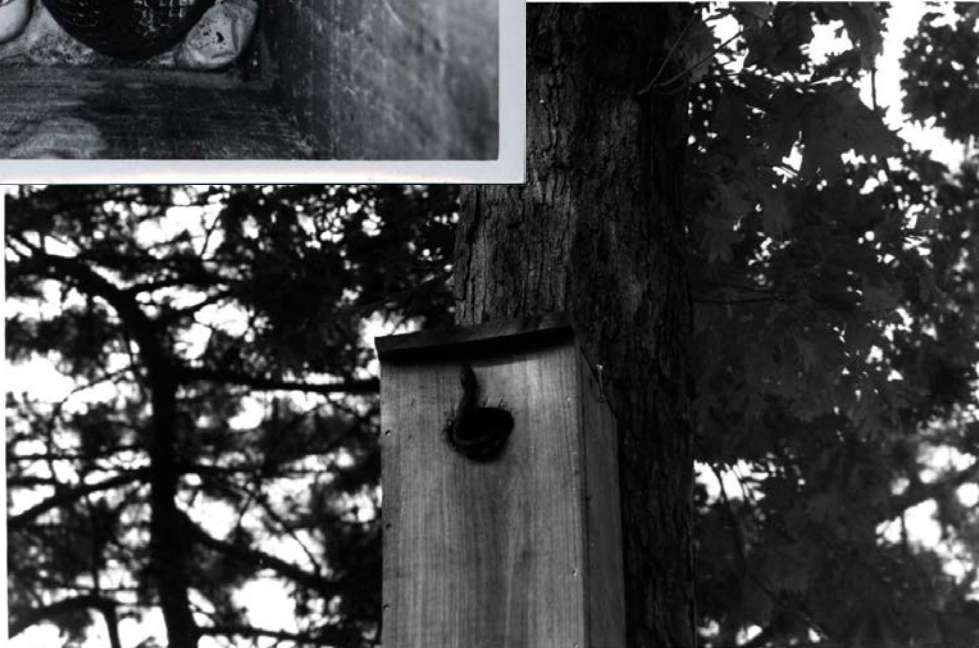
To give you an idea of the chronology of my project, here is Table I which lists the years showing number of nesting attempts, number of available nest sites or boxes, total eggs for the year, total ducklings hatched and lastly, nests or broods lost to predations.

My nesting project has had substantial local newspaper publicity through a near neighbor who, for years, was editor of our daily paper. As a result, many citizens have become interested and erected nesting boxes. Our park superintendent must have thirty nesting sites, many of which are occupied each year. All told, there may be over a hundred boxes in or near Burlington. I attempted to get annual reports on these boxes but the data was not considered reliable enough to be acceptable. On request I mail a mimeographed instruction sheet containing instructions for making and erecting nest boxes and covering their annual minimum maintenance. I have shown my pictures and given a talk on Nesting Wood Ducks to perhaps





# Wood Duck Predation



April 25, 1966

Mr. Donald Joffray  
The Loomis School  
Windsor, Connecticut 06095

Dear Mr. Joffray:

I have your interesting letter of April 20th. I have made some duplicate copies of my presentation to the Wildlife Management Institute at Lansing, Michigan last autumn. I am enclosing one. Hope you find something of interest.

Regarding screech owls, I feel a good deal the way you do about these little fellows and I have never discouraged their using my duck boxes. I felt that unless the screech owls were actually nesting that the ducks usually took over if they wanted the facilities.

One thing to look for in reference to the effectiveness of the oval holes against racoons is when you make your inspections next fall see how many entrances have been gnawed by racoons or other predators to gain entrance which they could have easily obtained had the full  $4\frac{1}{2}$ " diameter hole been in use.

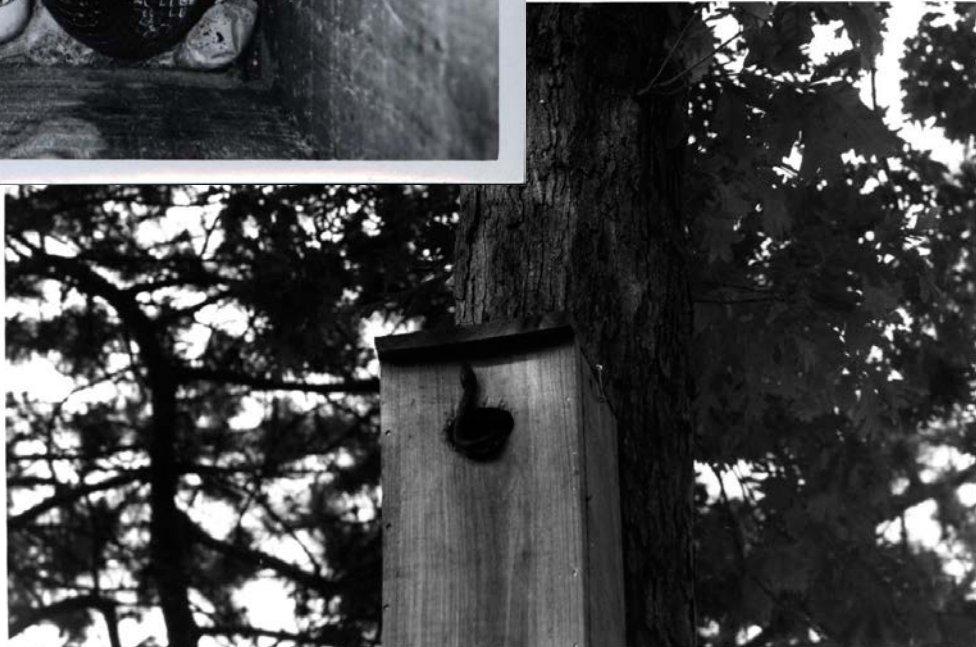
I do not understand why you stay away from your nesting sites during the summer. I am constantly making nesting inspection and checks during the nesting season with no adverse affect on the birds and with a tremendous increase in understanding of what's going on. Perhaps, you're just not in proximity to your boxes in the nesting season, but if you can look at your boxes, by all means do so.

You might be interested to know that my 22 boxes are all in an area of a little less than one square block and 7 of them are in an area having a radius of about 30 feet. There seems to be no conflict since most of these 7 boxes are used simultaneously. This, of course, makes inspection much simpler.

Your interpretation of what constitutes a successful hatch looks correct to me. You don't mention the fact that not only do you find the small chips of egg shells where the hatch has been successful but you also find the egg sacks generally split in two, approximately equal halves, in contrast to the condition that would have been obtained where a predator has devoured the eggs. Of course, when snakes have swallowed the eggs they leave no trace unless perhaps incubation has in process in which case the down would be left in the box.



# Wood Duck Predation



THIS ALONG WITH COPY OF SHEET ON WOOD DUCK NESTING BOXES SENT TO  
THOSE ON THE ATTACHED YELLOW SHEET 9/13/63

## REPORT TO WOOD DUCK OBSERVERS

Twenty people reported their observations on 50 nesting boxes with the following totals:

31 boxes produced successful hatches.

371 is the estimate of total ducklings hatched which equals an average of 12 young per brood.

Squirrels destroyed one nest.

Raccoons destroyed one nest.

Horned Owl destroyed one brooding female duck with resultant loss of the eggs.

Two nests contained broken eggs - probably squirrels.

Three nests containing eggs were deserted - cause unknown.

Four boxes were thought to have contained eggs, but results unknown due to insufficient observation.

43 total nesting attempts - estimated - of which 31 produced young. This percentage of success is doubtless much higher than would hold true under wild conditions where rate of predation would be much higher than it is in our city yards.

Thank you for participating - let's try again in 1964. I suggest that you check your boxes to see all is in order for the nesting season next March.

Frederic Leopold  
111 Clay Street  
Burlington, Iowa  
September 13, 1963

# Nesting Boxes / Letters

February 1, 1952

Thank you for your interest in the subject of attracting nesting Wood Ducks. Unfortunately I do not have sufficient copies of the reprints of my article "A Study of Nesting Wood Ducks in Iowa" as published in COMDOR last September. However, I give you below quotations from that article which, I believe, will give you the needed information.

"The material is rough, unplanned, 1" lumber, unpainted. Outside dimensions are 12" x 12" with a height of 24" at the front and 25" at the back. The lid is flush at back and sides but projects about 2" at the front. It is held in place by two screen door hooks plus an inner lid which fits loosely into the inside of the box. The entrance hole, 4" in diameter, is located 4" below the lid.

The box is attached to the tree by means of a which is first screwed into the tree. This bolt passes through in the back of the box located opposite the entrance hole. A washer plus a heavy wing nut on the end of the hanger bolt pre rigid fastening when tightly drawn. On a fast growing tree th can be loosened a few turns after a year or two if the washer into the back of the box.

Most nesting boxes are hung so that they are i reach with a 16' ladder. This appears to be high enough to sa the ducks.

A minimum of 4" of decayed vegetation from my pile is placed in the bottom of the box so that the ducks can their eggs and later form their nests. Leaf litter, or sawdus also do but coarse sticks should not be included. The ducks c nesting materials."

*Frederic Leopold*

*If you need more help let me know*

Frederic Leopold  
111 Clay Street  
Burlington, Iowa





# Nesting Boxes / Letters



June 1, 1966

Mrs. Sue L. Schroder  
1420 Penn Avenue  
Des Moines 16, Iowa

Dear Mrs. Schroder:

Thank you for your letter of May 29th. I am glad that you and your friends in Des Moines enjoyed the Des Moines Register article. From the description you give of your area where you have considerable wildlife present, I am wondering whether you and your friends would not find it interesting to build and erect, between now and next March, one or more wood duck nesting boxes. With this thought in mind, I am enclosing a mimeographed sheet which gives full instructions covering this type of project.

You would, of course, have to get someone to assist you in mounting or erecting the box. You also would have to get someone next spring to climb up a ladder to make determination as to whether or not you had an occupant.

You mentioned the fact that I might have other material which would be interesting to you and your friends and I regret the only publication that I have had printed in the past is now out of print and I have no copies available.

It just occurred to me that if you have good size trees near your living quarters that you might want to mount one of your boxes close to your house. I, for instance, have one within 12 feet of my bedroom window where I can hear and see the nesting female as she comes and goes on her twice daily rest flight during incubation.

Yours very truly,

Frederic Leopold

FL:MB  
Enc.



# In opposition to Ducks Unlimited



The Editor  
St. Paul Pioneer Press Dispatch  
345 Cedar Street  
St. Paul, Minnesota 55105

Dear Sir:

I have a letter from Dave Hall on the subject of forming an action committee for the purpose of investigating and promoting the present laws governing the hunting of migratory waterfowl. Recent news developments indicate that important violations are habitual in the far south - especially in Louisiana.

Of course that type of lawlessness should be presently suppressed and should have been stopped long ago.

My opinion, based on Aldo's book Game Management, is recognition of his law of "Limiting Factors" as covered on Pages 38 and 39 of his book. If you are not thoroughly conversant with that philosophy, let me recommend that you re-study his text. He gives a fine clarification of how this law works and how it must be used in Wildlife Management!

The effort in recent years has been based on habitat improvement. Clearly that effort has been largely wasted and has produced negative results because habitat is not presently a limiting factor.

There is no doubt in my mind that the present Limiting Factor is a lack of living breeding birds in the presently existing breeding areas.

Leading the group that has been pushing the improvement of habitat as a solution to our dwindling waterfowl population is the big D.U. program of soliciting contributions to their fund for creating added duck numbers. The sales pitch D.U. uses is "Give us your money and we will create nesting areas so that when the next open season comes along you can bag a few extra ducks your money has produced." But really the plan does not produce more ducks because our existing good nesting areas are not populated with living ducks.

Despite the fact that much former nesting areas have been drained, the reduction in living ducks has been even greater reduced due to excessive hunting kill than the reduction in nesting areas. The conclusion is that there is no shortage of nesting areas, only a shortage of living ducks. So that the great concentration of ducks found on refuge areas when they head north in spring are only a thin nesting population when spread out over presently available good nesting territory. We don't need more nesting ground, but we do need live ducks to use the available present areas.

*You have great power - we  
need you*

# Letter from A. Starker Leopold, UC-Berkley Museum of Vertebrate Zoology

UNIVERSITY OF CALIFORNIA

MUSEUM OF VERTEBRATE ZOOLOGY  
BERKELEY 4, CALIFORNIA

October 3, 1951

Mr. Frederick Leopold,  
The Leopold Company,  
Burlington, Iowa.

Dear Fritz:

I am proud as punch of your paper which reached my desk yesterday. I hope you are happy with it. Frank Darling read it this morning and was lavish in his praise for the neatness and precision of your work. All of us feel that it is an outstanding contribution to the literature on wood ducks, in fact, it is the classic paper on that species. Incidentally, Alden Miller was delighted to have it in The Condor. The reprints will be sent directly to you in the near future. Would you return a few of them for our distribution here in the Museum (perhaps ten copies).

I just returned from four days in the Jawbone country. We had the same pack horse as last year and he is just as good as ever. This time we hunted a little to the west of Powell Lake but on the same ridge. We killed two, mine being a small forked horn but the other buck was a monster, the largest I have ever seen in that country. The computed live weight was about 225 pounds. He even surpassed the big one we got last year.

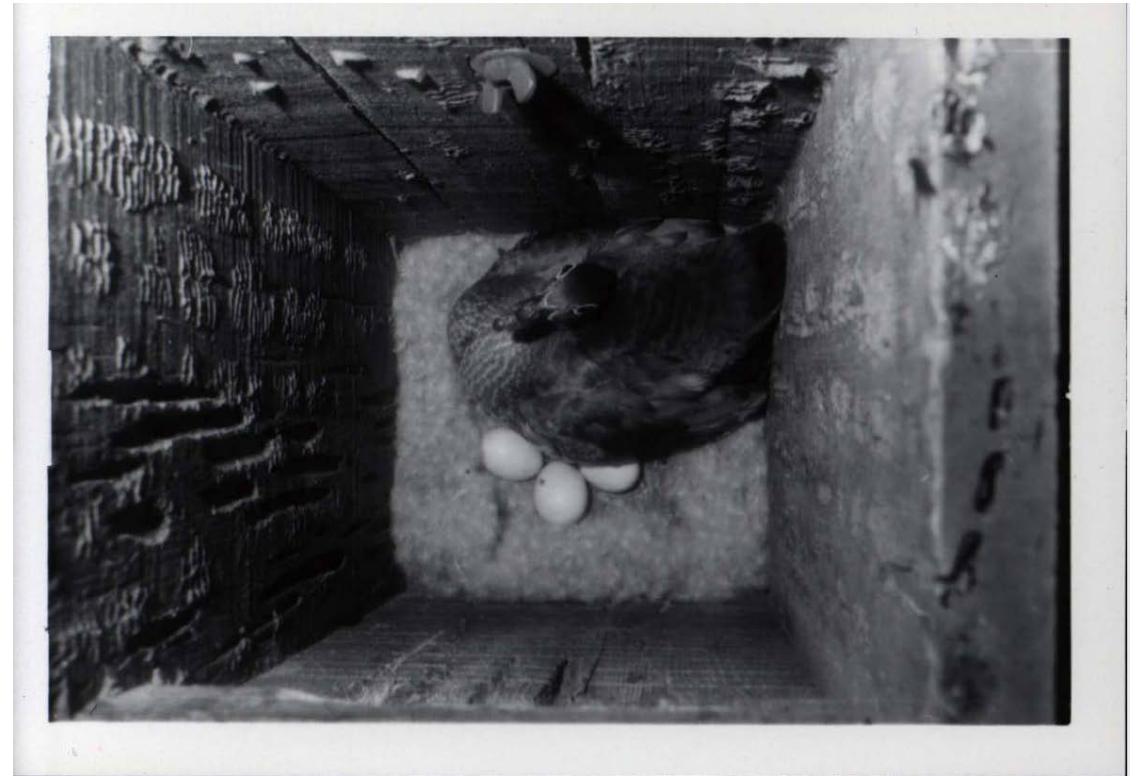
Love to all the family,

As ever,

*Starker*

A. Starker Leopold

ASL:az





# Letter from Ray Warner

DEAR MR. LEOPOLD,  
TODAY MARCH 21<sup>ST</sup> AS I WAS READING  
THE HAWK-EYE, I READ THE ARTICLE  
ON WOODDUCKS. AND IF I'M WRONG, JUST  
FORGET ABOUT THIS LETTER. A FEW  
YEARS BACK A MAN CAME TO OUR SCHOOL,  
SPERRY. HE SHOWED SLIDES AND TALKED  
TO US ABOUT WOODDUCKS, IT HAPPENED  
TO BE DURING WILDLIFE WEEK AND THEN  
AT THE END, WE GAVE HIM A CAKE THAT  
LOOKED LIKE A DUCK, IF I'M NOT MISTAKEN,  
THAT MAN WAS YOU. WELL, I'M A FRESHMAN  
AT MEDIAPOLIS NOW AND I'M PLANNING  
ON SOMEDAY BECOMING A CONSERVATION



OFFICER AS I LOVE THE OUTDOORS.  
I DON'T BELIEVE IN THAT STUFF  
ON BANNING HUNTING. AS I  
BELIEVE THAT HUNTERS KEEP  
THE BALANCE IN NATURE. BUT  
I DO THINK THAT YOUR RIGHT.  
THE SEASON SHOULD BE CLOSED

FOR A YEAR OR TWO.

I KNOW A LOT OF OTHER PEOPLE WHO CARE  
ABOUT WILDLIFE. BUT IF YOU CARE  
AS MUCH ABOUT WOODDUCKS AS I TAKE  
IT YOU DO, YOU CARE MORE THAN ANYBODY  
I KNOW.

SINCERELY,

Ray  
Warner



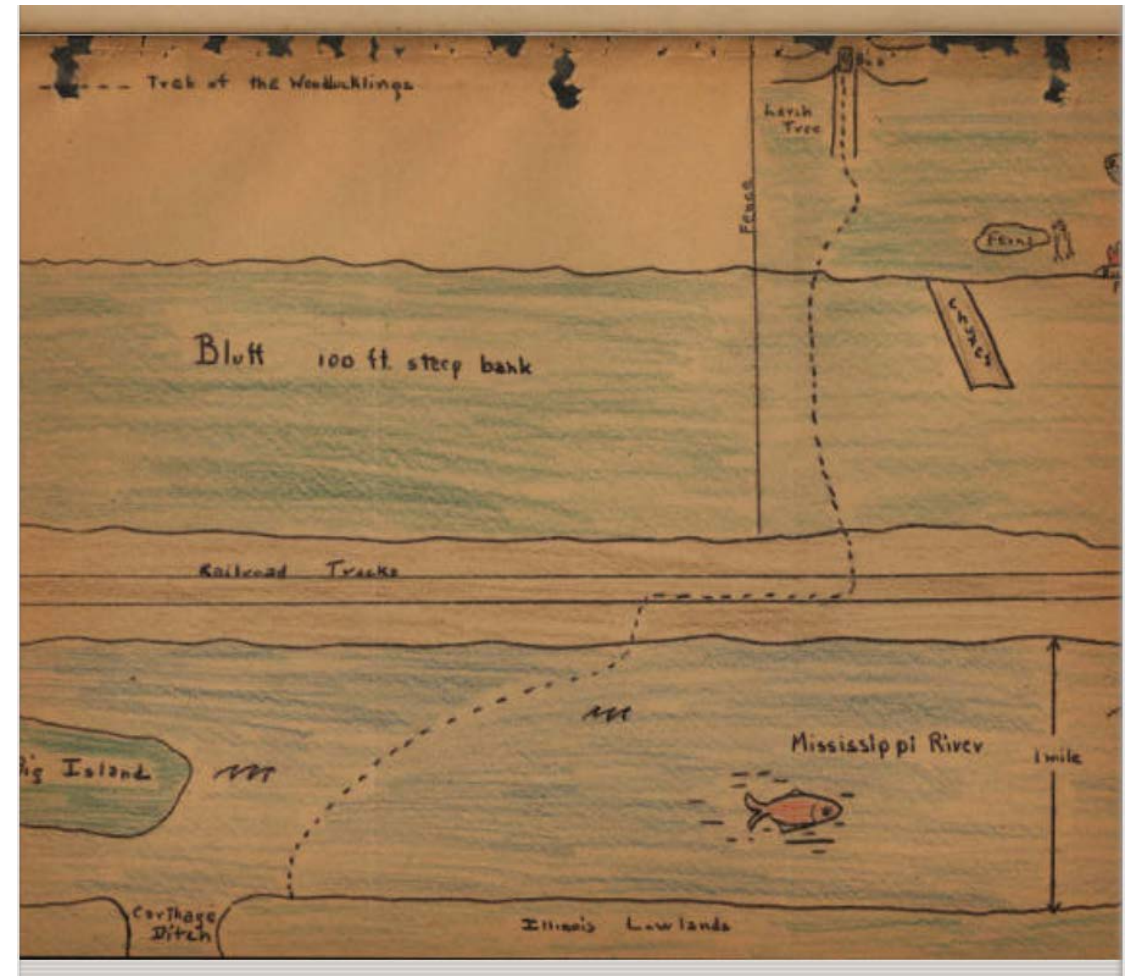
# Volume 1 of *Wood Duck Nesting Records:* *Trek of the Woodducks*, by Edith Leopold, Jr.

## TREK OF THE WOODDUCKS

July 12, 1944.

5:40 A.M. Edith, Jr. reported for duty to watch Woodduck box. Then Dad and Marry came over to say goodbye and catch the train for NYC. Mother joined in the watch for the exodus of Box #4. at 6:10 AM. Had blanket situated on West side of Fern Bracken. We didn't check box for fear of delaying chicks leaving the nest. At 6:15 AM the Hen returned to nest after feeding. It rained last evening and the ground is very damp. Northwest wind and weather blustery and slate gray. 6:33 AM we watch the Zephyr slide across the railroad bridge. Have a good time in NYC, Dad and Marry. Put Bell and Wally in the house, they objected strenuously.

6:45 AM hen stuck her head out of the box opening and it remained out until she left, for good. Stayed frozen, then after awhile she began bending her head around and peering at us, the sky, the ground. We must have bothered her so at 7:40 Mother and I moved





# Frederic Leopold & John Hale, Upper Mississippi River near Two Key (Turkey?) Island



# About the avlAn Project

- Web portal for Iowa ornithological primary sources dating from 1895-2012
- Includes ~10,000 objects from eight collections at ISU Library Special Collections:
  - Big Bluestem Audubon Society
  - Woodward Hart Brown Papers
  - Philip A. DuMont Papers
  - Fairfield Bird Club Records
  - Iowa Ornithological Association Records
  - Iowa Ornithologists' Union Records
  - Frederic Leopold Papers
  - Walter M. Rosene, Sr. Papers
- Funded by the Council on Library and Information Resources (CLIR) Digitizing Hidden Collections grant





# About the avlAn Project

## Objectives:

- **Increased Access** – high quality ornithology collections currently only accessible to onsite visitors, some collections have restricted access due to physical condition of materials
- **Comprehensive Materials Selection** – All material relevant to Iowa birds digitized from each collection, not just specific documents or images
- **Interdisciplinary focus** – selected materials encompassing both the scientific and the human side of bird watching and ornithological study
- **Collections as Data** – Second layer of metadata for a subset of records using field observation data standards (DarwinCore), shared to VertNet

## Inspiration:

- **North American Bird Phenology Program**
- **The Field Book Project**

# Collection Highlights

- ~3,000 rare bird documentations from Iowa Ornithologists' Union collection will receive Darwin Core metadata and be contributed to VertNet
- Compiled field notes, illustrations, photographs, and writings documenting 35 years of wood duck nesting studies conducted by Frederic Leopold at his home in Burlington, IA
- 271 lantern slides (many hand-colored) from Walter Rosene's bird watching trips around Iowa and the Midwest.
- Extensive correspondence illustrating the cultural and social aspects of bird watching and the community dynamics of birding clubs in Iowa.







# Departments/Units that Contributed to avlAn

- **Digital Initiatives**
- **Special Collections and University Archives**
- **Preservation**
- **Metadata Services**
- **Iowa State University Web Development Services**
- **Student Assistants**

# Citations

## Photographs

- F. Leopold, in suit, portrait: <https://n2t.net/ark:/87292/w9v97zr3q>
- Leopold house, nesting box in tree: <https://n2t.net/ark:/87292/w9c824d5p>
- Wood duck on nesting house: <https://n2t.net/ark:/87292/w9445hb9v>
- Ducklings leaving duck house: <https://n2t.net/ark:/87292/w9x63b508>
- Ducklings in bucket: <https://n2t.net/ark:/87292/w93r0ps9r>
- Male/female adults in tree <https://n2t.net/ark:/87292/w9bg2h926>
- Mother duck on eggs in duck house: <https://n2t.net/ark:/87292/w9cj87k37>
- Recently hatched ducklings with shells: <https://n2t.net/ark:/87292/w9h12v69f>
- Duckling jumping from duckhouse, below F. Leopolds window: <https://n2t.net/ark:/87292/w96q1sg7z>
- F. Leopold & J. Hale in boat, upper Mississippi River: <https://n2t.net/ark:/87292/w9vd6p44g>
- Snake in nesting box with eggs: <https://n2t.net/ark:/87292/w9qn5zb1t>
- Snake coming out of nesting box: <https://n2t.net/ark:/87292/w9sj19q7v>

## Letters & documents

- F. Leopold Letter to Sue Schroder in Des Moines: <https://n2t.net/ark:/87292/w99s1kj9z>
- F. Leopold letter to St. Paul Pioneer press, on hunting and duck populations, 1988 <https://n2t.net/ark:/87292/w9wm13t0z>
- Paper for duck management and research symposium: <https://n2t.net/ark:/87292/w9rx93c8w>
- Letter from Ray Warner: <https://n2t.net/ark:/87292/w9rv0d073>
- Letter from A. Starker Leopold: <https://n2t.net/ark:/87292/w95717n21>
- Wood duck nesting records, 1939 – 1953: <https://n2t.net/ark:/87292/w98p5v88c>
- <https://n2t.net/ark:/87292/w98p5v88c>
- Report to Wood Duck observers: <https://n2t.net/ark:/87292/w9h708053>
- Letter regarding Wood Duck house information: <https://n2t.net/ark:/87292/w91g0ht7s>
- F. Leopold Hunting Journal, 1921 – 1942: <https://n2t.net/ark:/87292/w9df6k31n>
- Map of Iowa: <https://d36fjnz5qqu02b.cloudfront.net/static/images/iowa.jpg>