LETTERS

DO CARRION BEETLES KILL YOUNG BIRDS?

Dear Editor:

In the spring of 1991 I was asked to monitor some nest boxes for the Prairie Nest Box Monitoring Program. I had placed the boxes out two years before and did not have the time previously to monitor the results. Of the 15 boxes I was monitoring ten had bluebird nests in them and five had swallows in the first hatch period.

On 19 June when I monitored nest box No. 4 there were six newlyhatched swallows, all in good health. On 27 June I found the female adult had built a small nest on top of the old nest and there were three eggs in the nest. There was a very bad smell coming from the nest and upon investigation, I found all the young swallows were dead in the nest below. Just the skins of them remained. The nest was a black. gooey mess. When I removed the remains, I noticed some movement in the bottom of the nest, and I uncovered ten large beetles there. I placed two of them in a plastic bottle and gave them to our ag. rep. to have them identified, giving him the information as to what had happened. They identified them as Giant Carrion Beetles and said that they did not think the beetles would kill the young birds and there must be some other reason the nestlings died.

On 18 July I checked nest box No. 9 and there were five bluebird eggs—the second nesting of these bluebirds. When I returned on 27 July the adult birds were absent and all five

newly hatched young were dead. Again, I noticed some movement in the bottom of the nest and found carrion beetles present. The birds all looked like they had died about the same time.

I have asked experts if they have had this problem and they do not think these beetles kill young nestlings. Mr. Warren Hjertaas, of Yorkton, also reported observing a nest of young bluebirds, nearly ready to fledge, which he found to be dead and with carrion beetles in the nest. It was his impression that they also were killed by these insects.

From the results of my monitoring I would say that these beetles do somehow kill the young and feed on them. Further monitoring will be necessary to confirm this in future years. I would be glad to hear of your experience with them.

Lorne Rowell, Box 639, Fort Qu'Appelle, Saskatchewan. S0G 1S0

Dear Lorne:

According to Ronald Hooper with the Museum of Natural History in Regina, he can find no reference in literature to carrion beetles killing vertebrates. He has only found them on dead birds or mammals and has never seen them attacking live ones. Adult carrion beetles, however, commonly feed on fly larvae on carrion. Their larvae feed on the carrion itself. Carrion beetles have the ability to find carrion readily and can be found on birds and mammals that have not been dead for long.

Editor.

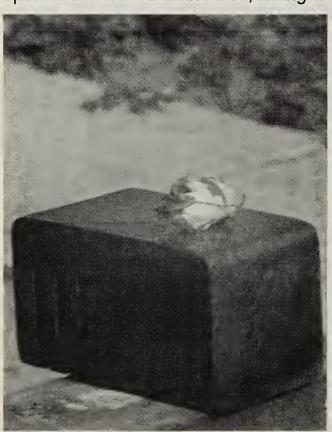
MYSTERIOUS COCOON

Dear Editor:

Enclosed is a picture taken last fall of a cocoon I found. It was lying on the ground at the outer edge of the leaf line of the weeping birch. I had almost stepped on it when I walked around the tree and it was a real thrill to see that it was a cocoon. Though I watch for cocoons this is only the second one I have come across.

Can it be identified by the picture? I have an old moth book, a library discard, but I find it a little hard to follow. There is a drawing and a description of a caterpillar very like two that I had noticed on the honeysuckle bushes; there is a drawing of a cocoon that looks just like the photo and it is called *Telea polyphemus*. There is a coloured picture of the moth by this name.

The cocoon is about two inches in overall length and was full and heavy. The other one I had seen, under a lilac bush was damaged and never hatched. This second one is safely hidden in the snow under the birch. The book describes the cocoon as being spun in the leaves of the tree, falling to



Polyphemus Silk Moth cocoon found near a Weeping Birch, Nipawin, Saskatchewan M.B. Evans

the ground later, which is how it appeared to be when I happened on it.

I carefully looked around the tree and the lilacs, but have not seen any more such specimens. I am certainly looking forward to see what emerges but do wonder if I am missing these cocoons. Would it be worthwhile to put a large caterpillar into a container to see if it will go into hibernation?

M.B. Evans, Box 71, Nipawin, Saskatchewan. S0E 1E0

Dear M.B. Evans:

Ronald Hooper of the Museum of Natural History in Regina looked at the photograph you sent and was able to identify it as a cocoon of the Polyphemus Silk Moth (*Antheraea polyphemus*). It used to be called *Telea polyphemus*.

According to Mr. Hooper, the Polyphemus Silk Moth prefers birch as a food plant, but it will also feed on willow, poplar or maple. The moth is fairly common in wooded areas of Saskatchewan.

Live caterpillars can be placed in jars and fed with fresh leaves from the food plant until they spin their cocoons and pupate. After a caterpillar has pupated indoors the jar with the cocoon needs to be placed out in a shed or similar place for part of the winter, where it will freeze. (A deep freeze is too severe.) The winter cold causes the creature in the cocoon to postpone developing and go into a resting state known as "diapause." The pupa can be fooled by bringing the cocoon indoors in mid-winter. The warmth of the house will cause it to think that spring has come. This will break the diapause state and cause the pupa to begin to develop into a moth. This could take from two weeks to a month.

When the pupa breaks open and the moth emerges it is helpful to put a small stick in the jar so it has something to

climb on and allowing it enough room to spread its wings.

Going through the above procedure does not guarantee that you will get a moth. If parasitic wasps have laid their eggs in the caterpillar, you would get wasps instead of a moth.

Editor.

ALBINO MAGPIE NEAR EDMONTON

Dear Blue Jay:

This is my response to the article "Observations of Albinism in Birds" by Jean Bancroft in the September 1991 issue of Blue Jay. On several occasions during the summer and fall of 1991, I spotted a grey and white coloured version of magpie in the central area of Edmonton (I am not sure it this was one bird or several). It appeared to be normal in all other respects, except that where a normal magpie has black, this one had a light grey colour. I paid particular attention to the eyes of this "albino" magpie. As albino mammals have pink eyes, I thought that an albino bird might also display this trait. This bird had normal looking black eyes. Therefore, I am not sure if this magpie was a light-coloured variant of a magpie, or if it was a true albino.

Unfortunately, I did not have a camera with me and so do not have a photograph as proof. I do have corroborating observations by others. The University of Alberta Department of Zoology maintains a long-term project on the populations of magpies around the university. They may have spotted this colour variation in their study. Bancroft's article brought these memories to the surface of my consciousness once more.

Miles Constable, Environmental Protection, Room 210, 2nd Floor, Twin Atria 2, 4999 - 98 Avenue, Edmonton, Alberta. T6B 2X3

WHAT A BLACK-TAILED GODWIT LOOKS LIKE

Dear Editor:

After I wrote the article detailing the discovery of a Black-tailed Godwit at Brown's Slough on 14 July 1990 (see Blue Jay 49:90), I sent a copy of the article to Fred Lahrman, a well-known bird artist. I asked him to paint a picture of the bird using only the material I gave him. He said he could and gave me the picture when he finished (see below).

The bird depicted resembles the one we saw, but ours had more grey on the back. When I was in Australia in October 1991, I saw many Blacktailed Godwits exactly as Fred has painted it. Although Fred's work is only a painting — not a photograph — it will give readers a good idea of the appearance of the bird we saw.

Frank H. Brazier, 2657 Cameron Street, Regina, Saskatchewan. S4T 2W5



Fred Lahrman's rendition of a Black-tailed Godwit Fred Lahrman

GUIDELINES FOR AUTHORS

Following the format used by a journal when a manuscript is prepared for submission eases the task of editing and preparing the article for printing. Handwritten copy is not refused; the following guides should also be used by those who do not have access to typewriters or computers for preparation of their submission.

Style

The *Blue Jay* is the journal of the Saskatchewan Natural History Society and publishes articles of scientific or general interest dealing mainly with the northern prairie area. Papers are accepted from members of the Saskatchewan Natural History Society or any other interested individual. Reporting of any observation of significance in the field of natural history is encouraged. The *Blue Jay* is classed as a semi-refereed journal. All submissions are reviewed by at least one individual competent in the field plus the editor.

Except in the case of letters, the use of the pronouns "I" and "we" are not encouraged, nor is the use of melodramatic reporting — these more properly belong in popular magazines. Also the use of proper names of observers is more correct than designation by titles such as Mr., Mrs. or Dr. Reporting of rare species or unusual occurrences should include as much detail as possible. For example, the interest lies as much in which of the field marks of a rare bird were seen as in the fact that it was observed at a given location and time.

Photographs and sketches add a

great deal to the impact of an article on its readers. Although the Saskatchewan Natural History Society maintains a file of photographs available for illustration, it is by no means complete and new material or relevant illustrations are welcomed.

Scientific names are not used for North American bird and mammal species for which common names are adequate to identify the species under discussion. For plants, insects, and palaeontological species both common and Latin names are used; the latter are indicated as being italicized by a single underline, and appear in parentheses following the first occurrence of the common name, if known. Common names are written with capital letters when they are an accepted name for the species. Current sources of common names being used are as follows:

AMERICAN ORNITHOLOGISTS' UNION. 1983. The A.O.U. checklist of North American birds. Sixth Edition.

BANFIELD, A.W.F. 1974. The mammals of Canada. National Museum of Natural Sciences, University of Toronto Press, Toronto.

Where a list of plant species is given it is customary for the author to state the source of common names used (i.e., MOSS, E. H. 1967. Flora of Alberta. University of Toronto Press, Toronto). In cases where no common name can be found in literature, use of the latin name alone occurs. In these cases, use photographic and/or material sketches becomes even more valuable.

Numbers are written out from one to nine (inclusive); digits are used

with standard units of measure, including dates, times, page numbers, percentages, etc.. Above nine, numerals are use for all numbers. When a number less than 10 occurs with numbers 10 or greater, then that number should also be a numeral. Never begin a sentence with numerals, reword the sentence, write out the number, or end the preceding sentence with a semicolon. Very large numbers should make use of a word or prefix (e.g., 1.6 million).

Dates are usually written with the day, followed by the name of the month, then the year. The use of the word "on" is usually avoided unless the date appears at the beginning of a sentence.

Time can be noted using either the 12- or 24-hour clock. When using the 24-hour clock the time is given as four digits, two each for hours and minutes, not separated and it should be followed by the abbreviation h for hours, e.g., 2113 h. The 12-hour clock requires the use of a colon between the hours and minutes and the designation a.m. or p.m. (e.g., 9:13 p.m.).

Distance can be given in either the English or metric (SI) systems, however use only one system within the article. Mile is abbreviated mi.; kilometre is abbreviated km (note no period, also for metre – m, centimetre – cm, etc.).

Direction can be given using the abbreviations n, s, e, w, ne, nw, se, sw, etc. without periods.

Tables are given a number for identification within the text. The table number portion of the heading is in upper and lower case; the title is in all upper case (e.g., Table 1: BIRD NUMBERS). Subheadings are usually in upper and lower case unless for purposes of separating several sets of subheadings it is necessary to use a style such as all capitals. Underlining of subheadings denotes that they are to be in italics.

Please note that letters and very short notes are usually set with the author's name(s) and address(es) at the end of the text, following an em dash. Since most typewriters do not have an em dash, a double hyphen (—) is substituted. The same system applies to book reviews.

If there is uncertainty about some aspects of format and style please check with a recent issue of *Blue Jay* for similar types of articles. When in doubt, consult the **CBE Style Manual** (Council of Biology Editors Style Manual, Fourth Edition 1978, CBE, American Institute of Biological Sciences, 1401 Wilson Boulevard, Arlington, VA, USA 22209) and follow their suggested format or style.

The original and one copy should be submitted of all text and figures. Please send one copy of photographic material (keep the original), or send the original if you do not want to keep a copy of the photograph for yourself. Add a note with your submission if you would like the photographic material returned, otherwise it will be added to the Blue Jay photographic file. The Saskatchewan Natural History Society does not guarantee the return of photographic material. Slides can by copied for use by the printers. Prints should be on glossy paper, either black and white or colour. If your prints are on a matte or other finish, please send the negative so that glossy prints can be made. Captions and photo credits should accompany all photographic material.

Format

Titles are all in capital letters, beginning at the left margin at the top of the article and are not underlined or on a separate page. Authors' names are capitalized and begin at the left margin. The address (no abbreviations to be used) is in the upper and lower case with the province name followed by a period, after which the postal code appears.

Text should all be double-spaced to allow space for the insertion of editorial changes (please see section for computer users regarding spacing).

Paragraphs do not require indentation but an extra space should be left between paragraphs. Headings within the text are not underlined or capitalized and begin at the left margin.

No title is required to the references which are listed alphabetically at the end of the article, with authors' names in capitals, the remainder of the reference in upper/lower case. References are numbered consecutively with superscript numbers. These numbers are usually placed at the end of the sentence in which the reference is made (the superscript numbers may be entered by hand in typewritten submissions). Please do not put commas bereference numbers listed tween together, separate them by a single space. Lower case is used in titles with the exception of the beginning letter and proper nouns. Standard abbreviations are used for publication names where possible. Names of journals are underlined to denote italics.

It is especially important that authors check all references for accuracy and completeness. Not all of the publications you may have seen are available to the editors, and checking references is a very time-consuming and thankless task. For others who may wish to consult these references it is a great frustration to find incomplete or incorrect information.

For Computer Users

Manuscripts may be submitted in text file form on IBM compatible 5.25 in. or 3.5 in. DSDD diskettes which will be returned to authors when copies have been made. At least one paper copy of the manuscript should be included. Currently the editor has access to the wordprocessing program Wordperfect 5.1, thus materials entered using this program can be sent without changing to text file format. This program will also import WordStar documents.

The use of several style modifications when entering material will also reduce the time required for editing and preparing these papers. The document should be single spaced; please double space the hard copy which will be used by the editors. Headings in the text should be in bold face; anything that should appear in italics should be underlined. If possible leave only a single space after the period at the end of the sentences. Extra spaces are removed when the article is coded for typesetting. Paragraphs are separated by two hard returns with no indents, tabs or spaces at the beginning of the paragraph. Tables are more easily handled if set up using tabs to define the columns. If your program does not handle superscript numbers designate them by a double asterisk (i.e., ³ is noted by

Following the above guidelines will save time and trouble for your editors, all of whom are volunteers. Your article will also likely appear in print more quickly after you submit it.

From page 100, the answers to the quiz on Cree bird names are as follows:

piskwa – Nighthawk kas-kas-kus-kee-ka-chas – Song Sparrow little raven – Magpie raven duck – Cormorant