

LIST OF GENERA OF ALGAE IN
WASCANA LAKE

Cyanophyta

(Blue-green Algae)

<i>Anabaena</i>	*+++
<i>Aphanizomenon</i>	+++
<i>Aphanocapsa</i>	++
<i>Chroococcus</i>	+
<i>Glaucocystis</i>	R
<i>Marssoniella</i>	R
<i>Merismopedia</i>	+
<i>Microcystis</i>	+++
<i>Nostoc</i>	R
<i>Oscillatoria</i>	+
<i>Phormidium</i>	R
<i>Spirulina</i>	R

Chlorophyta (Green Algae)

<i>Acanthosphaera</i>	R
<i>Actinastrum</i>	R
<i>Ankistrodesmus</i>	+
<i>Chlamydomonas</i>	++
<i>Chlorella</i>	++
<i>Closteridium</i>	R
<i>Closterium</i>	+
<i>Coelastrum</i>	+
<i>Cosmarium</i>	++
<i>Euastrum</i>	+
<i>Enteromorpha</i>	+
<i>Franceia</i>	R
<i>Gonium</i>	R
<i>Golenkinia</i>	+

<i>Micractinium</i>	R
<i>Oedogonium</i>	R
<i>Pandorina</i>	+
<i>Pediastrum</i>	+
<i>Polyedriopsis</i>	R
<i>Protococcus</i>	R
<i>Pyrobotrys</i>	R
<i>Rhizoclonium</i>	+++
<i>Scenedesmus</i>	+++
<i>Selenastrum</i>	R
<i>Spirogyra</i>	+++
<i>Staurastrum</i>	+
<i>Stigeoclonium</i>	R

Chrysophyta (Yellow-green and Golden-brown Algae)

<i>Botrydiopsis</i>	+
<i>Chrysamoeba</i>	R
<i>Chrysidiastrum</i>	R
Diatoms	+++
<i>Meringosphaera</i>	R
<i>Ophiocytium</i>	R

Euglenophyta (Euglenoids)

<i>Euglena</i>	+++
<i>Phacus</i>	R
<i>Trachelomonas</i>	R

Chloromonadophyta

(Chloromonads)

<i>Gonyostomum</i>	R
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* R(rare), + (present), ++ (present in every collection), +++ (abundant)

WHAT IN THE WORLD?

In the September 1971 *Blue Jay* on page 144 we challenged you to identify an interesting capsulate fruit of a flowering plant. The fruit had been sent in to the Agricultural Research Station in Regina and Keith Best and your *Blue Jay* editor had fun speculating about what family it belonged to. Keith soon identified it as Devil's Claws or Unicorn Plant (*Proboscidea louisianica*, *Martynia louisiana* in some manuals of botany). I was curious to know whether any of our readers could recognize it from the photograph. The plant does not grow in Canada and I was completely unfamiliar with the family.

The fruit shown in the photograph had been sent in for identification but it had come to Canada in the tail of

one of the 85 horses brought in from Colorado for sale at the Inwood Auction Market in Manitoba. It was said that there were "several of these objects in the tails of the horses." The identification was confirmed by the Plant Research Institute in Ottawa. (Incidentally, the photographic credit which I gave to Keith Best should have gone to Bill Fleming.)

Keith Best gave me the information that the plant grows mainly in Arizona, New Mexico and Texas rather than Colorado. The plant is low growing with wide-spreading branches to three feet in length. The leaves are heart-shaped at the base and 4-12 inches across. The flowers are *Gloxinia*-like, two inches long and creamy-white to light red or violet in color.

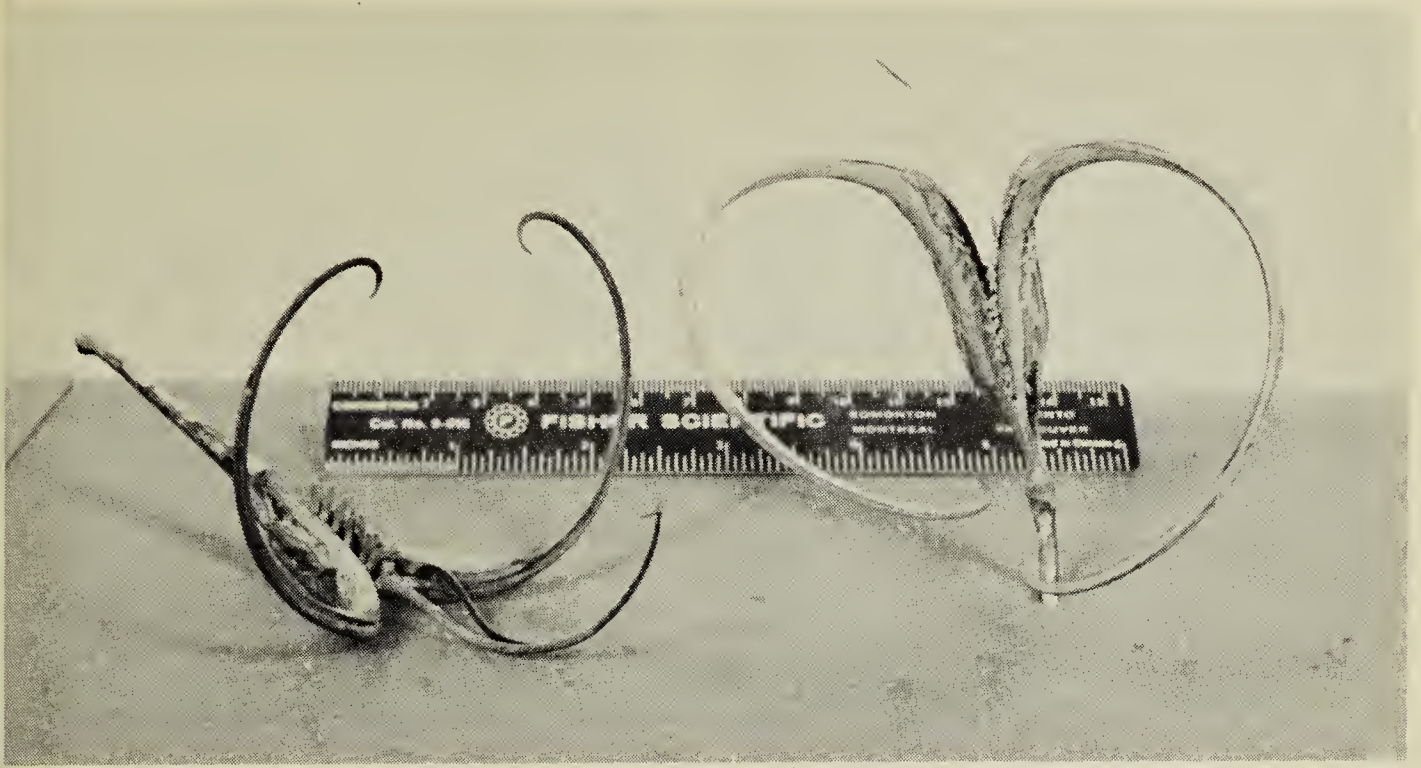


Photo by John Stronski

Devil's Claws collected in Arizona desert by Mrs. Flock, 1971

The fruit is about four inches in length with a curved beak of about the same length. When the fruits mature, they become hard and woody and the beak splits to form two large opposed, hook-like appendages as shown in the accompanying photo by John Stronski.

The September *Blue Jay* was not yet released from the printers when I got my first answer to the question "What in the World?" Betty Cruickshank showed me three Devil's Claws, two of which are shown in the accompanying photo. She knew their common and scientific names. Her specimens had been collected in June, 1971, by Betty Flock near Superstition Mountain in the Arizona desert. Mrs. Flock, who is wintering at Apache Junction in Arizona, had brought some to Regina when she came home for the summer. She said they were also called "Texas Mosquito"; possibly you can guess why.

Soon after the *Blue Jay* was distributed we had three identifications of the unique fruit. All were correct. Dr. Job Kuijt, University of Lethbridge, Alberta wrote ". . . the fruit of a unicorn plant, probably a species of *Proboscidea* of the family Martyniaceae. I have collected similar fruits, a bit shorter and wider, which were lying

around in the sandy desert in Baja California, Mexico." Probably another species of *Proboscidea*.

Harold A. Kantrud, wildlife biologist, U.S.D.I., Jamestown, North Dakota wrote, "a seedpod of *Proboscidea louisianica* (Mill.) Thell. (Martyniaceae). Known commonly as unicorn plant, elephant's trunk and martinoe, reference books list it as a southwestern species, occurring as far northeast as West Virginia and Ohio. The plants are occasionally cultivated and used for pickles."

Robert K. Shaw, Cardston, Alberta wrote that it "looks very much like the 2-carpelled, 1-loculed horned capsule of the unicorn plant, *Proboscidea louisianica* . . . I first saw this plant in fruit on October 5, 1969 while on a field trip with Prof. Stanley L. Welsh of Brigham Young University in Beaver Dam Wash, Washington County, southwestern Utah.

In his unpublished master's thesis on the flora of the Beaver Dam Mountains, (BYU, 1967) Larry Higgins reported its occurrence from southwestern Utah to southern California, at elevations of 3,00 feet or lower, and flowering from June to August.

around the hoof of a horse if stepped
The fruit is also thought to catch

around the hoof of a horse if stepped on, as well as tangling in the mane, tail or fetlock hair. The seeds are probably dispersed in a similar manner by other grazing animals.

Beaver Dam Wash in Utah contains elements of the northern-most extension of the Lower Sonoran Desert and is a most interesting place botanically. At Terry's Ranch in the Wash, a Fremont poplar growing on the bank of a small irrigation ditch has a circumference of 24 feet at a height of five feet above ground. Pomegranate trees also

flourish in a small orchard and china-berry trees shade part of the yard."

I should like to thank all the correspondents for their interesting letters for they have not only added to our knowledge but they have given us a confidence that the *Blue Jay* is read by thoughtful and well-informed people.

I hope that readers who have difficult questions in natural history will present them to the *Blue Jay*. Some reader is sure to know the answer.—*Editor*.

The Blue Jay Bookshelf

ANNUAL BIRD REPORT FOR SOUTHERN VANCOUVER ISLAND. 1970. Edited by J. B. Tatum. Published by the Victoria Natural History Society. 72 pp. \$1.90 post-paid. Available from Dr. J. B. Tatum, 416-3187 Shelbourne Street, Victoria, Canada.

This is the first in what is intended to be an annual series of bird reports for an area including Victoria, Duncan and the Saanich Peninsula. It gives details of 235 species observed, and includes migration dates, census results, breeding records and authoritative accounts of rarities.

The reliability of the records is vouched for by the Ornithological Records Committee for Southern Vancouver Island, formed in Victoria in 1970. Any records for the 1970 Report that are rare, out-of-season, or difficult to identify, were handled by the committee. In order to evaluate records the committee insists on carefully documented observations but specimens are not sought. Indeed, the title page of the bulletin bears this quotation from Emerson's essay on Forbearance:

"Hast thou named all the birds
without a gun?"

Photographs are included in the report to establish the identity of two species recorded for the first time on Vancouver Island — the Tufted Duck and the Wheatear.

In order to make identification easier in the future, encouragement is being

given to the building up of a photoduplicate file in the Vertebrate Museum of the University of British Columbia and of a collection of tape-recordings of bird songs maintained in Victoria by Mrs. H. M. S. Bell. The whole activity offers an example to other natural history groups interested in preserving valid records.—*Margaret Belcher, Regina*.

STUDIES OF BIRD HAZARDS TO AIRCRAFT. 1971. By V. E. F. Solman, W. W. H. Gunn, M. T. Myres, S. R. Cannings, W. J. Richardson, J. M. Speirs, J. J. C. Kanitz, J. Novak, and H. Blokpoel. Canadian Wildlife Service Report Series Number 14, Information Canada, Ottawa. 105 pp., \$1.25.

This book is the latest in a series of reports on research conducted by or in association with the Canadian Wildlife Service. A "Perspective" by V. E. F. Solman, in both English and French, introduces the reader to the comparatively recent problems caused by bird-aircraft collisions and to the development of a bird migration forecast system in Canada. The rest of the book consists of reprints of two general articles previously published elsewhere, followed by five original contributions of a more technical nature. These seven papers are as follows: Bird control and air safety, by V. E. F. Solman (pp. 7-14); A bird-warning system for aircraft in flight, by W. W. H. Gunn and V. E. F. Solman (pp. 15-22); A Canada