



# Aquatic Illinois Trunk – Binder Contents Checklist Key

## Illinois Biodiversity Basics promo page

**Illinois Biodiversity Basics**  
a biodiversity education program of  
Illinois Department of Natural Resources  
**World Wildlife Fund**

Adapted from *Biodiversity Basics*, © 1989, a publication of World Wildlife Fund's Windows on the World biodiversity education program.

**Illinois Biodiversity Basics** lessons may be accessed at the following Web page.  
[http://www.dnrillinois.gov/education/Documents/BioBasics\\_publication.pdf](http://www.dnrillinois.gov/education/Documents/BioBasics_publication.pdf)

Illinois Department of Natural Resources  
Division of Education  
One Natural Resources Way  
Springfield, IL 62702-1271  
217-524-4326  
Fax: 217-782-9552  
<http://www.dnrillinois.gov/education>  
[dnrteachs@dnrillinois.gov](mailto:dnrteachs@dnrillinois.gov)

## Illinois Biodiversity CD-ROM activities sheet

**ILLINOIS BIODIVERSITY**  
CD-ROM Activities

**Section 1: What is Biodiversity?**  
**What's Your Biodiversity IQ?**  
Take a "quiz-whiz quiz" to find out how much you know about biodiversity, especially in Illinois.  
LEARNING STANDARDS: English language arts: Writing Standards for Literacy in Science, Production and Distribution of Writing, 4; science: MS-L52-5

**Using Up Species**  
Classify organisms using a classification flow chart, play a team game to find out how many species may exist within different groups of organisms, and make a graph to illustrate the relative abundance of living things.  
LEARNING STANDARDS: science: MS-L52-5

**Background BioBitz**  
Assess an ecological survey, then take a firsthand look at biodiversity in your community.  
LEARNING STANDARDS: English language arts: Writing Standards for Literacy in Science, Production and Distribution of Writing, 4; science: MS-L52-5

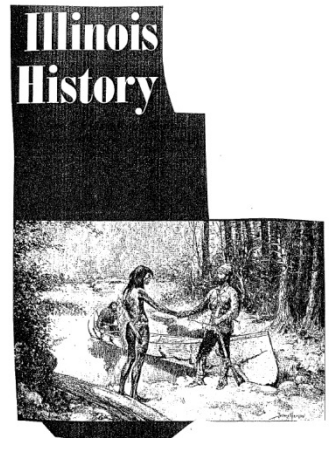
**The Gene Scene**  
Play several different games that introduce genetic diversity and highlight why it's important within populations.  
LEARNING STANDARDS: science: MS-L52-5

**Section 2: Why is Biodiversity Important?**  
**The Nature of Poetry**  
Read and discuss several poems related to biodiversity, then write original biodiversity poetry.  
LEARNING STANDARDS: English language arts: Writing Standards for Literacy in Science, Range of Writing, 10

**The Spice of Life**  
Explore beliefs and values about why biodiversity is important and why it should be protected.  
LEARNING STANDARDS: English language arts: Writing Standards for Literacy in Science, Production and Distribution of Writing, 4; science: MS-L52-5

**Secret Services**  
Perform simulations that demonstrate some of the important ecosystem services that biodiversity provides.  
LEARNING STANDARDS: science: MS-L52-5

## Illinois History articles



## Illinois Wetlands: An Interdisciplinary Study activities

## Large Rivers of Illinois poster guide

## mini plankton net instructions

### Illinois Wetlands: An Interdisciplinary Study Publication

Correlation to Learning Standards

The correlations to State Goals for each activity shown in the publication, Illinois Wetlands: An Interdisciplinary Study, are no longer relevant. These activities have been correlated to current learning standards, where possible, and listed in this document. Extension suggestions for the activities are not included in the correlations. All correlations are for primary suggested grades. They do not include coincidental correlations. You may find that your other teaching activities support the correlation of this unit to learning standards in a variety of your learners, too.

Targeted Grade Levels: 6-8.

Please note that not all of the activities included in this publication have direct correlations to current learning standards.

#### Activity 3 – What about Those Cattails?

Illinois Social Science Standards: Inquiry Skills: SS.1S.1.6-8, SS.1S.2.6-8.

Reading Standards for Literacy in Science and Technical Subjects: Key Ideas and Details 1, 3; Craft and Structure 4; Integration of Knowledge and Ideas 7, 9.

#### Activity 4 – So What? Why Study Cattails?

Illinois Social Science Standards: Inquiry Skills: SS.1S.1.6-8, SS.1S.2.6-8.

Writing Standards for Literacy in History/Social Studies, Science and Technical Subjects: Range of Writing 10.

#### Activity 5 – Falls in a Tub

Reading Standards for Literacy in History/Social Studies: Key Ideas and Details 1, 3; Craft and Structure 4; Integration of Knowledge and Ideas 7.

Writing Standards for Literacy in History/Social Studies, Science and Technical Subjects: Research to Build and Present Knowledge 7, 8, 9; Range of Writing 10.

Next Generation Science Standards: The relevant standards, if any, will be determined by the research projects selected by the class.

**AN EDUCATIONAL GUIDE TO THE LARGE RIVERS OF ILLINOIS POSTER**

**Background Information:**

- The large river system in Illinois is a complex network of waterways that drain into the Mississippi River basin. These rivers are vital for transportation, agriculture, and recreation.
- The Illinois River is the largest river in Illinois, extending 1,100 miles from the north to the south. It is a major waterway for the state.
- The Mississippi River is the longest river in the United States, stretching 3,760 miles. It is a major waterway for the central United States.
- The Ohio River is the longest river in the eastern United States, stretching 2,511 miles. It is a major waterway for the eastern United States.
- The Missouri River is the longest river in the western United States, stretching 3,900 miles. It is a major waterway for the western United States.

**Warranty and Parts:**

All products guaranteed free from defect for 90 days. This guarantee does not cover damage caused by misuse, neglect, or accidents. It is the responsibility of the user to inspect and maintain the product properly.

**Sampling Procedures:**

Fieldmaster Plankton Nets can be used in many field conditions. They are most often used horizontally from a boat, but they can also be used for vertical sampling and sometimes even in shallow water.

When working with students, it is always a wise to attach the net in something sturdy, to check all knots, and to make sure the sample bottle is oriented or tight.

**Horizontal Tows can be done from the shore if you attach a line to the moved ring and use the net offshore. Pull it in as a steady pace. Another method for sampling from shore is to attach the net to a telescoping pole such as a painter's pole. For vertical sampling, simply tie a line to the moved ring. It is a good idea to attach the other end of the line to the boat. If sampling from a dock or pier, use rope to something sturdy. You can attach a small weight to help keep the net in an upright position.**

**Visit us online at [www.sciencefirst.com](http://www.sciencefirst.com)**

**Fieldmaster® Plankton Nets**

**Warranty and Parts:**

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**Visit us online at [www.sciencefirst.com](http://www.sciencefirst.com)**

**Need professional equipment?**  
Our sister company **Wildlife Supply Company** manufactures a wide variety of water sampling equipment for use by research professionals. Please call **800-779-8101** for a free catalog, or check our website at [www.wildlife.com](http://www.wildlife.com).

55 Bedford Place, Berlin, N.J. 07814, U.S.A.  
908.765.2211 • 762.878.8113 • FAX: 762.878.8137 • [www.sciencefirst.com](mailto:www.sciencefirst.com) • [info@sciencefirst.com](mailto:info@sciencefirst.com)

## Online Resources page

**Lesson Plans and Student Activities**  
Lesson plans, background information, student activities, slides and other resources are part of the teaching kits produced by the Illinois Department of Natural Resources (IDNR). Aquatics, birds, wild mammals, trees and landbirds are among the topics currently available. Scan the code or visit the following Web address to explore this information.  
<https://www2.dnrillinois.gov/education/Pages/lessonplans.aspx>

**Publications**  
Activity books and booklets are included in this trunk. You downloaded many of these original copies, but you can also download to enjoy them for use with your students. DNR publications may be downloaded or purchased. Visit <https://www2.dnrillinois.gov/education/Pages/education/bkts> or scan the code to reach the order form.

**SMARTboard™ Lessons**  
The IDNR Division of Education has prepared SMARTboard™ lessons for presentation in classrooms. A variety of topics are available. You can visit <https://www2.dnrillinois.gov/education/Pages/Smartboards.aspx> or scanning the code.

**Podcasts**  
Podcasts produced by the IDNR Division of Education are available on the IDNR Web site under Podcasts Search for IDNR content. These are lessons in audio or video format available on your computer. You can scan the code or visit the following Web page to explore this information.  
<https://www2.dnrillinois.gov/education/Pages/podcasts.aspx>

## Recursos Acuáticos de Illinois activity book

**Recursos Acuáticos de Illinois**

Illinois Department of Natural Resources

## student kick net instructions

**LaMotte**  
**STUDENT GRADE KICK NET**  
CODE 9172

**ASSEMBLY**

The Student Grade Kick Net does not include poles. Poles are available from LaMotte Company (Code 0911-POLES) or can be purchased at hardware stores that sell climbing rods or PVC pipe. The poles should be 4 feet long and have a maximum diameter of 1 1/2 inches.

The poles on the sides of the net are open at one end. The net should be positioned with the poles opening at the top. Insert a pole into the open end of each pole. Push the poles into the bottom of the net. This will allow the net to be filled with the bottom of the container when collecting samples.

**STORAGE & CARE**

Keep all sharp objects (such as sticks, stones, etc.) away from the net to avoid damaging it.

After use, clean the kick net and air-dry completely before storing.

**USING THE KICK-NET**

The following are general directions for use of the kick-net. Contact local or state natural resource department, or other monitoring group, for their recommendations on site selection and location. Kick net use, collection of net poles for identification of local species, and collection. Obtain any permits that may be required for collecting aquatic organisms from the state agency.

Attach the net to the kick-net, the following equipment should be used: rubber gloves and boots or waders (to keep hands and feet protected), white collecting pans, baggies or containers, measuring device or level, towels, preservative and sample jars (collected with data, site number, etc.), before going into the field.

The sampling site should be selected prior to sampling. Sampling should take place in an area where the stream flows swiftly and there are an unobstructed stretch of rocks and stones. This is known as a riffle area. Since these areas provide a good habitat, with plenty of oxygen (the water is well-aerated) for aquatic invertebrates, sampling will receive a diverse sample.

# Aquatic Illinois Trunk – Binder Contents Checklist Key

## IDNR Lending Trunks promo sheets



## The Illinois and Michigan Canal, A Study in Economic History table of contents

CHICAGO HISTORICAL SOCIETY COLLECTION, No. 2

### THE ILLINOIS AND MICHIGAN CANAL

*A Study in Economic History*  
By JAMES WILLIAM PUTNAM, Ph. D.  
*Illustrations by James H. Paine*

Illinois General Publication

STANFORD LIBRARY  
THE UNIVERSITY OF CHICAGO PRESS  
CHICAGO  
1928

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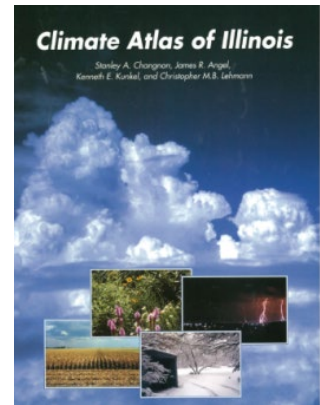
ILLUSTRATIONS	
ILLINOIS—Outline Map . . . . .	Frontispiece
CHICAGO PLAIN—Relief Map . . . . .	op. p. 4
CRAY OF ROCKFORD . . . . .	op. p. 85
CRAY OF TOLLS AND EXPENSES . . . . .	op. p. 87
TRUMPION'S PLAY OF CHICAGO . . . . .	op. p. 94
CHICAGO HARBOUR . . . . .	op. p. 106
CRAY OF FRESH CANAL . . . . .	op. p. 113

# Aquatic Illinois Trunk – Large Container Contents Checklist Key

4-inch standard dip net

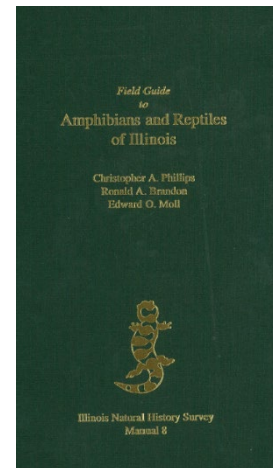
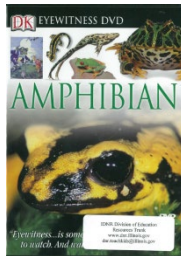
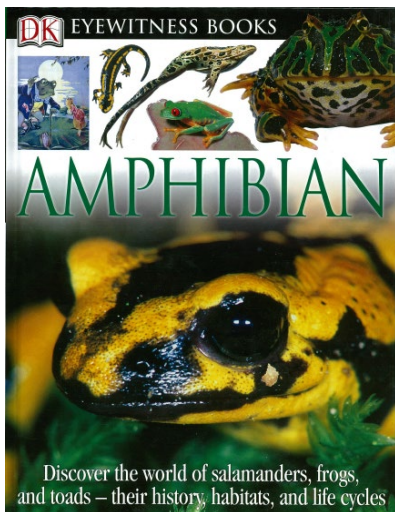
aluminum pan (3)

Climate Atlas of Illinois book



Eyewitness: Amphibian book and DVD

Field Guide to Amphibians and Reptiles of Illinois book



# Aquatic Illinois Trunk – Large Container Contents Checklist Key

**Field Guide to Freshwater Invertebrates of North America book**



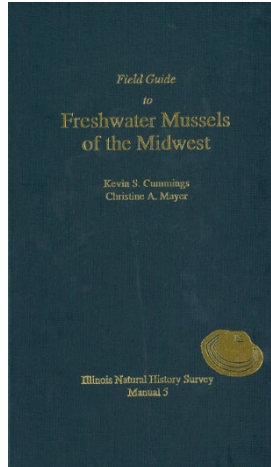
**Field trip observation containers**



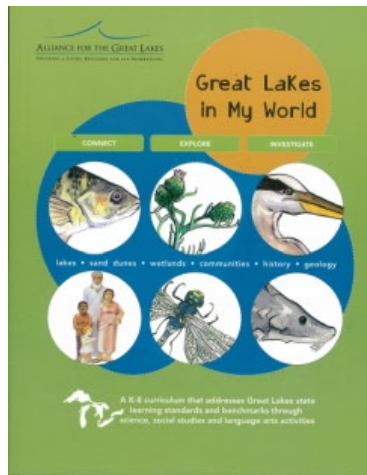
**mini plankton net**



**Field Guide to Freshwater Mussels of the Midwest book**



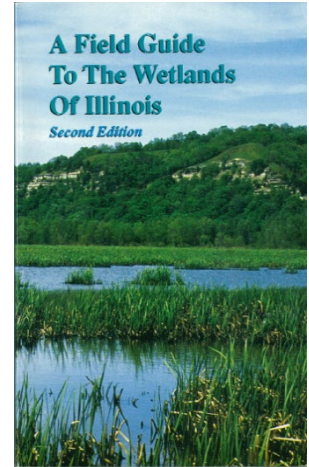
**Great Lakes in My World book**



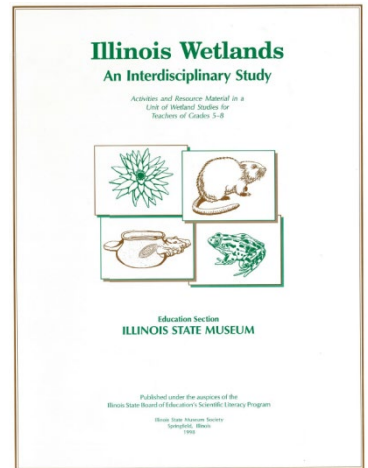
**observation container**



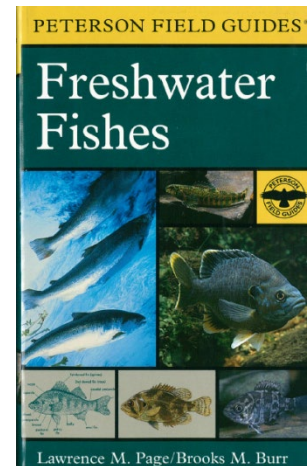
**Field Guide to Wetlands of Illinois book**



**Illinois Wetlands: An Interdisciplinary Study book**



**Peterson's Field Guide: Freshwater Fishes book**



# Aquatic Illinois Trunk – Large Container Contents Checklist Key

plant press



plastic forceps (30)



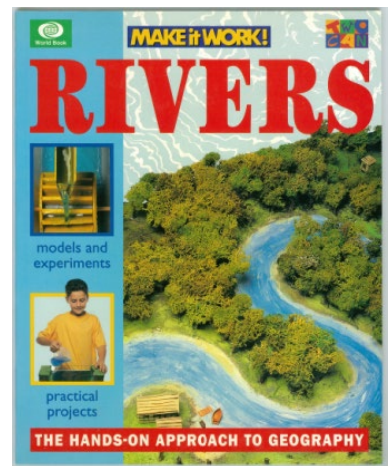
pond turtle shell



pond turtle skull replica



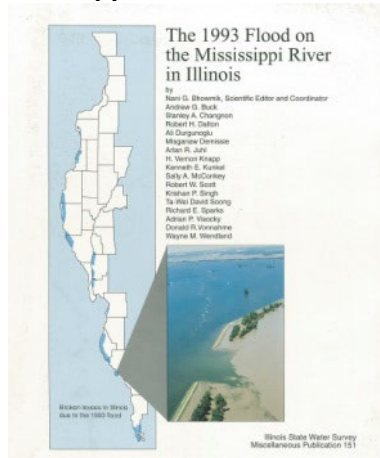
*Rivers: The Hands on Approach to Geography* book



student kick net



*The 1993 Flood on the Mississippi River in Illinois* book

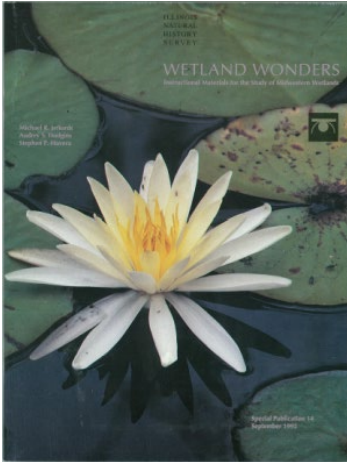


*Water Wise: Safety for Recreational Boating* book

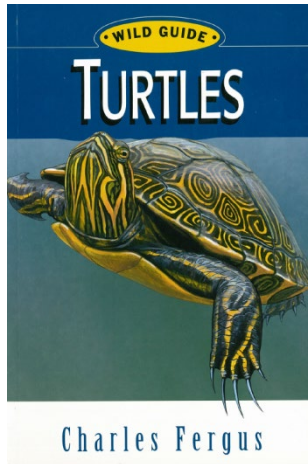


# Aquatic Illinois Trunk – Large Container Contents Checklist Key

Wetland Wonders guide

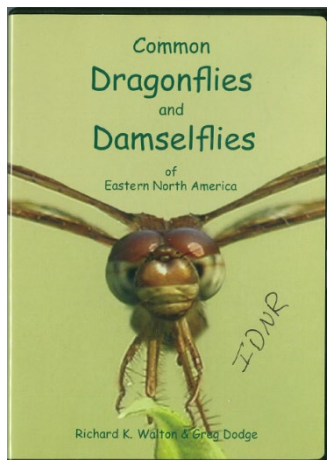


Wild Guide - Turtles book



## Aquatic Illinois Trunk – Box 1 Contents Checklist Key

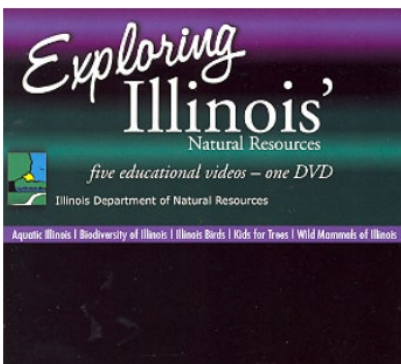
Common Dragonflies and Damselflies of Eastern North America DVD



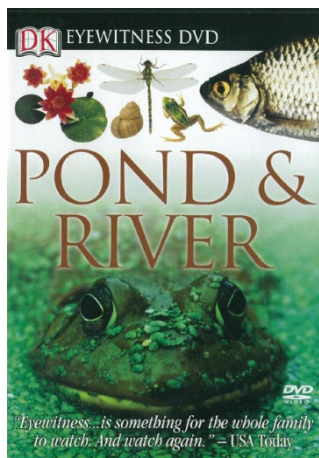
Exotics to Go! CD-ROM



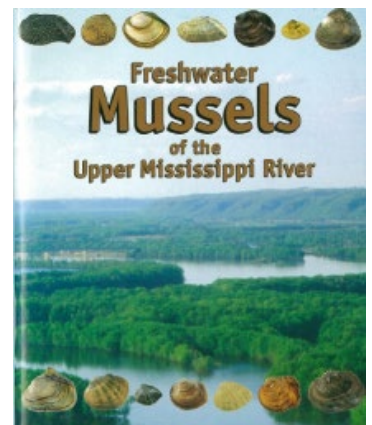
Exploring Illinois' Natural Resources DVD



Eyewitness: Pond and River DVD

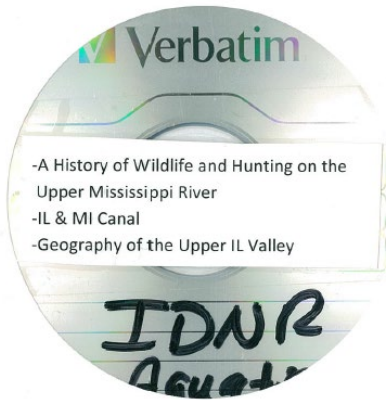


Freshwater Mussels of the Upper Mississippi River book

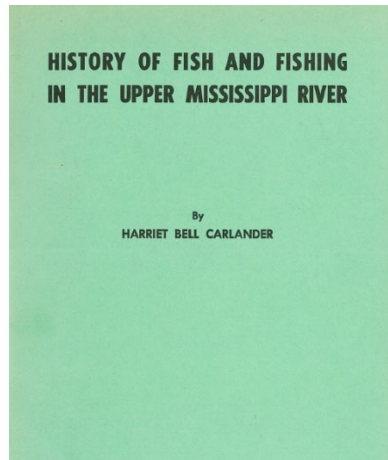


# Aquatic Illinois Trunk – Box 1 Contents Checklist Key

**Geography of the Upper Illinois Valley and History of Development CD (.pdf format)**



**History of Fish and Fishing in the Upper Mississippi River Book (book and .pdf format)**



**Illinois Biodiversity CD-ROM**



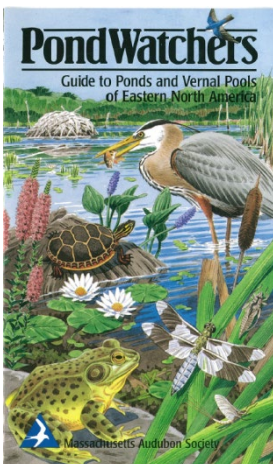
**National Audubon Society Pocket Guide to Waterfowl book**



**Pipettes (12)**



**Pondwatchers Field Guide**



**Safety at Dams brochure**

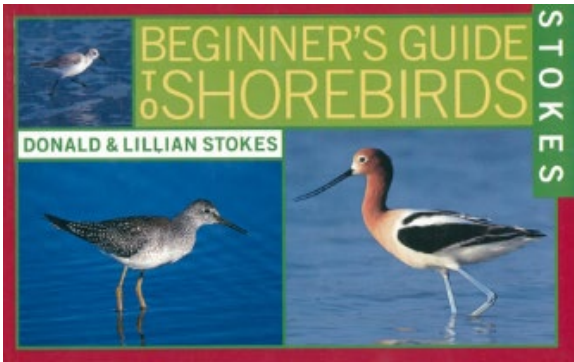


**Sea Grant ID Cards**

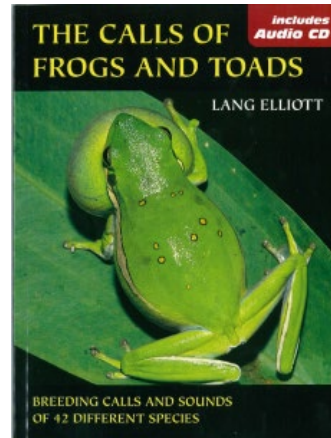


## Aquatic Illinois Trunk – Box 1 Contents Checklist Key

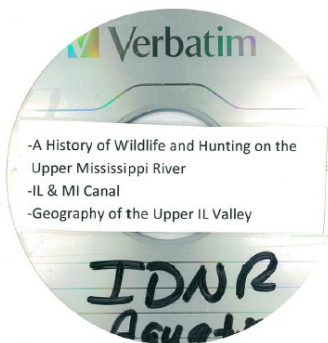
*Stokes Beginner's Guide to Shorebirds* book



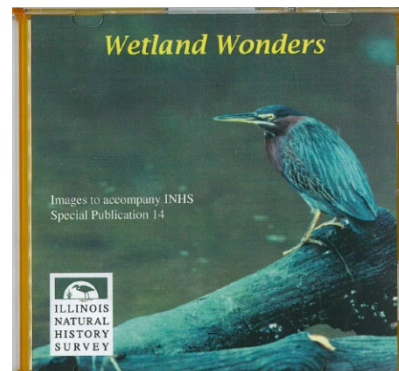
*The Calls of Frogs and Toads* book and CD-ROM



*The Illinois and Michigan Canal: A Study in Economic History* CD (.pdf format)



*Wetland Wonders* CD



## Aquatic Illinois Trunk – Box 2 Contents Checklist Key

beaver track replica



coot track replica





# Aquatic Illinois Trunk – Box 2 Contents Checklist Key

dragonfly specimen



frog track replica



goose track replica



great blue heron track replica



## Great Lakes in My World: Creature Cards

Great Lakes in My World

### Creature Cards

Over 60 illustrated information cards featuring Great Lakes plants and animals



## Illinois' Natural Resources Trading Cards

(note: some trunks may not have all the trading cards)



# Aquatic Illinois Trunk – Box 2 Contents Checklist Key

snapping turtle track replica



threehorn wartyback mussel shell



threeridge mussel shell

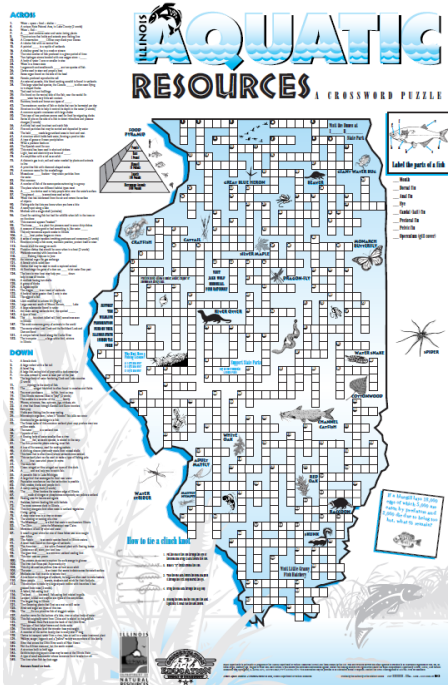


zebra mussel vial

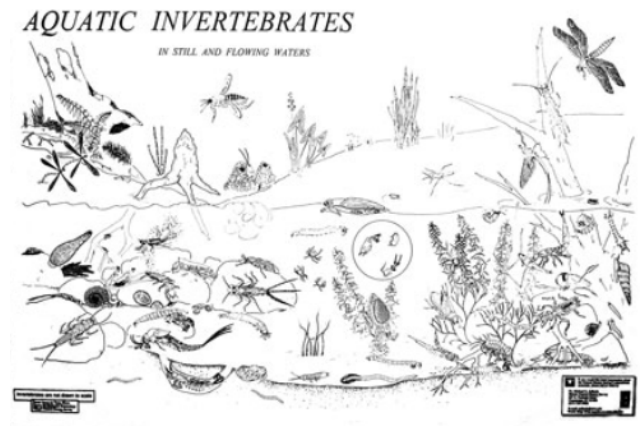


# Aquatic Illinois Trunk – Poster Key

Aquatic Crossword Puzzle



Aquatic Invertebrates in Still and Flowing Water




# Aquatic Illinois Trunk – Poster Key

## Bighead and Silver Carp Watch

### BIGHEAD AND SILVER CARP WATCH

Bighead and silver carp are invasive fish spreading within the Mississippi River and Great Lakes regions causing harm to native fish and wildlife.



**Bighead Carp** (*Hypophthalmichthys molitrix*)

**Silver Carp** (*Hypophthalmichthys molitrix*)

**Bighead & Silver Carp Characteristics**

- Low set eye; large voracious mouth without barbels
- Scaleless head, body scales very small
- Adults may be more than 60 lbs. in weight and 4 ft. in length
- May jump out of water when disturbed by boat motors
- Juveniles difficult to distinguish from local baitfish species such as gizzard shad (see photos)

**What You Can Do**

- Learn to identify bighead and silver carp.
- Never release live fish from one body of water into another.
- Report new sightings – note exact location; freeze specimens in a sealed plastic bag, and call the InvasivFind and See Great Program [847.872.8671], the Illinois DNR [309.968.7531], or the Indiana DNR [317.234.3883].

**Bighead Carp Juvenile**     **Gizzard Shad Juvenile**     **Silver Carp Juvenile**

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## Habitats are Homes

### Illinois Habitats are Homes



**PRAIRIE**     **URBAN**     **AQUATIC**     **WOODLAND**

**A** habitat is a community of plants and animals that live together in a specific area. Each habitat has its own unique characteristics that support a variety of plants and animals. Understanding habitats helps us appreciate the diversity of life and the importance of protecting our natural resources.

**Illinois Department of Natural Resources**

**Conservation of Illinois' Natural Resources**

34.00 x 36.00 in

## Great Lakes Fishes

### Great Lakes Fishes



**Sea Grant**

[www.seagrant.org](http://www.seagrant.org)     [www.greatlakesfish.org](http://www.greatlakesfish.org)

## Illinois Aquatic Macroinvertebrates

### Illinois Aquatic Macroinvertebrates



**H**undreds of species of aquatic macroinvertebrates live in Illinois. Each species has its own unique characteristics that allow it to survive and thrive in its environment. Understanding these creatures helps us appreciate the complexity of aquatic ecosystems and the importance of protecting water quality.

**Illinois Department of Natural Resources**

**Conservation of Illinois' Natural Resources**

34.00 x 36.00 in

# Aquatic Illinois Trunk – Poster Key

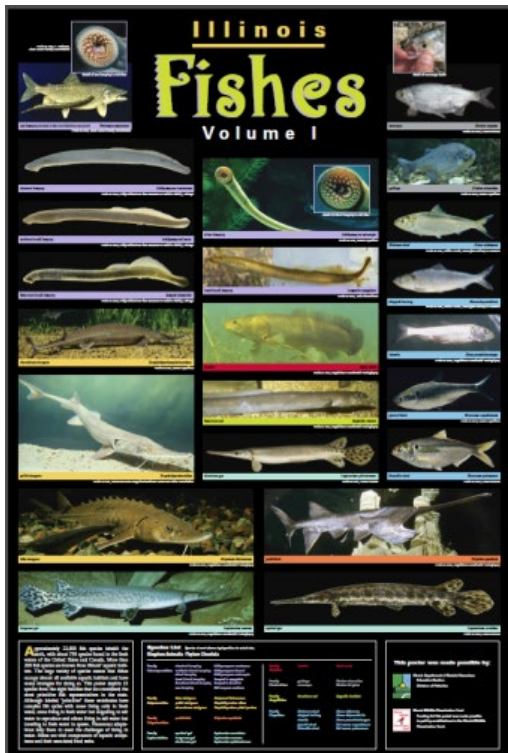
Illinois Birds: Volume V, Shorebirds



Illinois Common Birds



Illinois Fishes Volume 1



Illinois Frogs & Toads

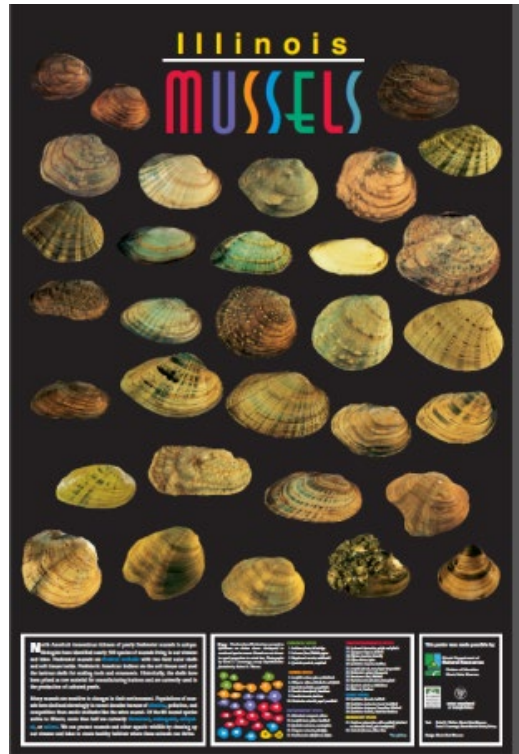


# Aquatic Illinois Trunk – Poster Key

## Illinois Furbearers



## Illinois Mussels



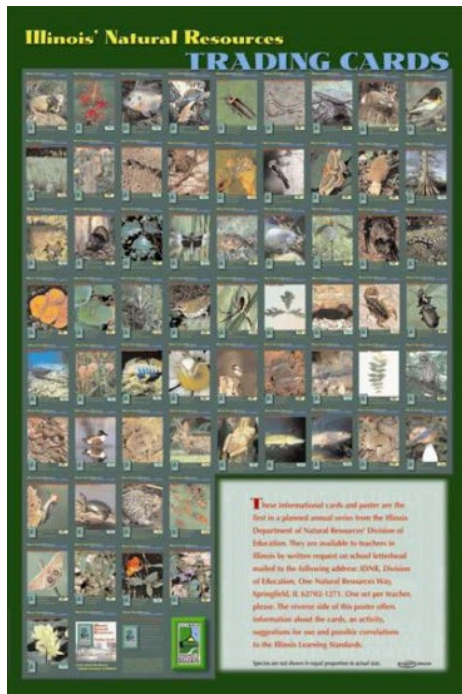
## Illinois' Natural Divisions



**Illinois' Natural Resources Trading Cards Posters**  
 (note: some trunks may not have all the trading card posters)

# Aquatic Illinois Trunk – Poster Key

**Illinois' Natural Resources  
Trading Cards Set 1**



**Illinois' Natural Resources  
Trading Cards Set 2**



**Illinois' Natural Resources  
Trading Cards Set 3**



**Illinois' Natural Resources  
Trading Cards Set 4**



# Aquatic Illinois Trunk – Poster Key

## Illinois' Natural Resources Trading Cards Set 5



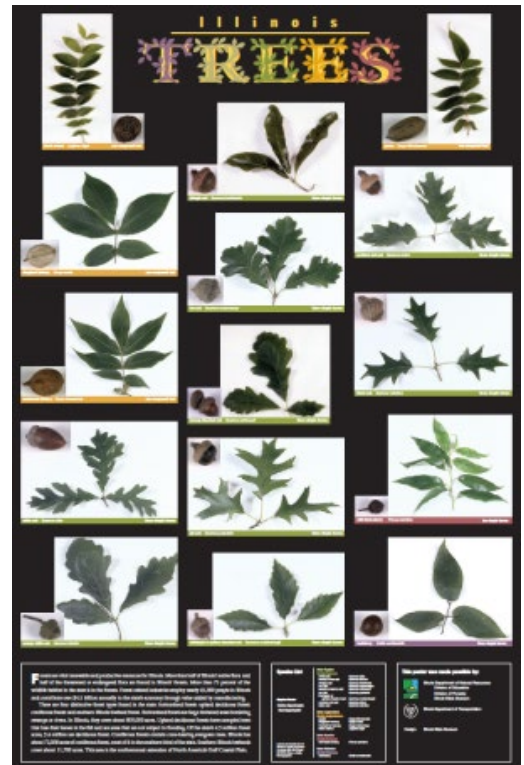
## Illinois Salamanders



## Illinois Snakes



## Illinois Trees: Seeds and Leaves



# Aquatic Illinois Trunk – Poster Key

## Illinois Trees: Volume II



## Illinois Turtles



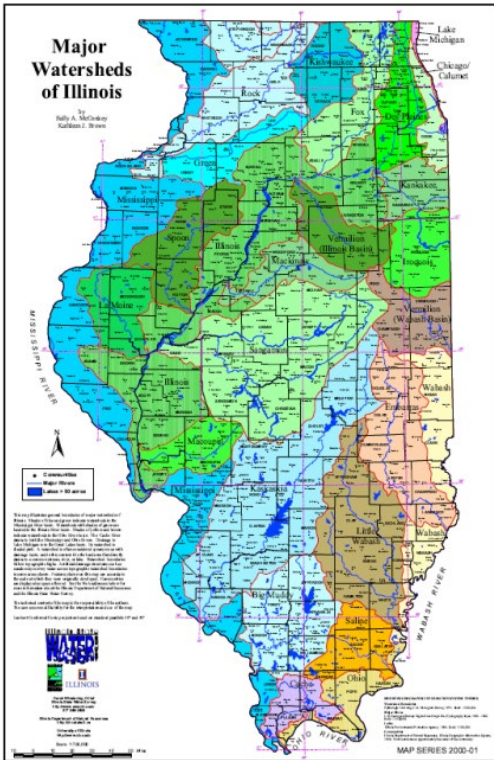
## Large Rivers of Illinois





# Aquatic Illinois Trunk – Poster Key

## Major Watersheds of Illinois



## Safety at Dams

**DANGER DAM!**

**Dangers Posed by Low-Head Dams**

The recirculating currents and turbulent waters below can swamp vessels and drown boaters.

The currents above low-head dams can sweep you over the dam.

The backwash below low-head dams can suck you under the dam.

[http://www.boater-ed.com/images/animations/lowhead\\_dam.html](http://www.boater-ed.com/images/animations/lowhead_dam.html)

**Keep Your Distance - Keep Your Life!**

**People Die**  
preventable deaths at dams every year.

**Know the locations**  
of a low head dam and practice recreational safety at all times.

**International Symbols**


**Dam Safety Websites:**  
<http://www.illinoisboating.org>  
[http://www.boater-ed.com/images/animations/lowhead\\_dam.html](http://www.boater-ed.com/images/animations/lowhead_dam.html)  
<http://www.standingspillerillinois.org/cleanwaters/danger.php>  
<http://www.acanet.org>

# Aquatic Illinois Trunk – Equipment Outside of Trunk Key

telescoping-handle dip net



turbidity tube



student kick net poles

