

"FISH IOWA! - HOOK, LINE & SINKER "

- For 4th & 5th Graders - An Introductory Unit of the Where, Who, What, How and Why of Freshwater Fishing in Eastern Iowa and Beyond (completed in Five (5) Sessions, Ten (10) Hours)

I. Session 1 - History of Fishing in Iowa, Aquatic Habitats, Resource Management, *Iowa Fishing Regulations*, Angler Ethics and Safe Fishing (including Basic First Aid and Dress)

A. Introduction

1. This session is aligned to acquaint the first time angler with those important points of emphasis that lead to a fantastic experience fishing in Eastern Iowa and beyond

B. Objectives

1. Students will come to be knowledgeable regarding fishing in Iowa from a historical context.
2. Students will come to be knowledgeable regarding form and management of Iowa's aquatic resources, including habitat types found in those waters and their importance.
3. Students will come to be knowledgeable regarding basic Iowa fishing regulations.
4. Students will come to be knowledgeable regarding individual angler behavior and treatment of the resources - a.k.a. "ethics", and their importance.
5. Students will come to be knowledgeable regarding safety concerns while participating in the sport of fishing in Eastern Iowa.

C. Materials

1. Handouts (One [1] per individual angler)
 - a. *Fish Iowa! Module* - Written Examination - Used as a pre-test - Appendix L (using Questions 1 -43)
 - b. *Fish Iowa! Module* - Glossary - Appendix N
 - c. Iowa's Waters - Handout 1-1
 - d. *Iowa Fishing Guide*
 - e. *Fish Iowa!* - Review Sheet 1-1
 - f. *Fish Iowa!* - Review Sheet 1-2
 - g. *Iowa Fishing Regulations*
 - h. *Fish Iowa!* - Review Sheet 1-3
 - i. *Fish Iowa!* - Review Sheet 1-4
2. Audio-Visual
 - a. IOWA DNR - BASIC SPIN-CASTING MODULE SUPPLEMENTAL DVD Rom - "Introduction to Fishing" - Title 2
 - b. IOWA DNR - BASIC SPIN-CASTING MODULE SUPPLEMENTAL DVD Rom - "Aquatic Habitats" - Title 3
3. Other
 - a. DVD Player and Projection Unit
 - b. First Aid Kit example

D. Time

1. Optimally - Two (2) 60 minute periods

E. General Outline of Activities delivered with the assistance of the manual - *Fish Iowa! A Teaching Module* (pages 3-16)

1. Activity 1: PRE-TEST

- a. Under the supervision and guidance of the Instructor, the students will complete the Appendix L - Written Examination of our *Fish Iowa! Module* - Questions 1 through 43

- (1) Completed using a "PAIR, READ & SHARE" comprehension technique (standard practice throughout "*FISH IOWA!* - HOOK, LINE & SINKER"). They will retain this Pre-Test for the duration of the five (5) Sessions, so as to make notes of updates to their answers, as we move forward from Lesson to Lesson

2. Activity 2: IOWA FISHING - A

- a. The Instructor will distribute to each student an individual copy of the following
 - (1) *Fish Iowa! Module* - Unit 1 - Introduction To Fishing - Narrative pages 3 through 12
 - (2) *Fish Iowa! Module* - Glossary - Appendix N
 - (3) *Iowa Fishing Guide*
 - (4) Iowa's Waters - Handout 1-1, page 21
 - (5) *Iowa Fishing Regulations*
 - (6) *Fish Iowa!* - Review Sheet 1-1, page 17
 - (7) *Fish Iowa!* - Review Sheet 1-2, page 18
 - (8) *Fish Iowa!* - Review Sheet 1-3, page 19
 - (9) *Fish Iowa!* - Review Sheet 1-4, page 20

3. Activity 3: IOWA FISHING - B

- a. The Instructor and students will view IOWA DNR - BASIC SPIN-CASTING MODULE SUPPLEMENTAL DVD Rom - "Introduction To Fishing" - Title 2 (length of 00:00:00 thru 00:04:22)

4. Activity 4: IOWA FISHING - C

- a. The Instructor and students will view IOWA DNR - BASIC SPIN-CASTING MODULE SUPPLEMENTAL DVD Rom - "Aquatic Habitats" - Title 3 (length of 00:00:00 thru 00:04:22)

5. Activity 5: IOWA FISHING - D

- a. The Instructor, focusing on pages 3-5 in Unit 1 of the *Fish Iowa! Module*, will relate and discuss
 - (1) Eastern Iowa's history of fishing
 - (2) Eastern Iowa's various bodies of water and their characteristics
 - (3) The different regions of those Eastern Iowa bodies of water
 - (4) Under the supervision and guidance of the Instructor, the students will complete the FISH IOWA! - Review Sheet 1-1. This is to be completed using a "PAIR, READ & SHARE" comprehension technique (standard practice throughout "FISH IOWA - HOOK, LINE & SINKER")

6. Activity 6: IOWA FISHING - E

- a. The Instructor, focusing on pages 6 & 7 in Unit 1 of the *Fish Iowa! Module*, will relate and discuss
 - (1) Eastern Iowa's fishery problems and management
 - (2) Under the supervision and guidance of the Instructor, the students will complete the FISH IOWA! - Review Sheet 1-2. This is to be completed using a "PAIR, READ & SHARE" comprehension technique (standard practice throughout "FISH IOWA - HOOK, LINE & SINKER")

7. Activity 7: IOWA FISHING - F

- a. The Instructor, focusing on pages 7, 8 & 9 in Unit 1 of the Fish Iowa Module, will relate and discuss
 - (1) Eastern Iowa's Fisheries Regulations and Ethics
 - (2) Under the supervision and guidance of the Instructor, the students will

complete the FISH IOWA! - Review Sheet 1-3. This is to be completed using a "PAIR, READ & SHARE" comprehension technique (standard practice throughout "FISH IOWA - HOOK, LINE & SINKER")

8. Activity 8: IOWA FISHING - G

- a. The Instructor, focusing on pages 10, 11 & 12 in Unit 1 of the *Fish Iowa! Module*, will relate and discuss
 - (1) Safety, First Aid and Dress
 - (2) Under the supervision and guidance of the Instructor, the students will complete the FISH IOWA! - Review Sheet 1-4. This is to be completed using a "PAIR, READ & SHARE" comprehension technique (standard practice throughout "FISH IOWA - HOOK, LINE & SINKER")

II. Session 2 - The Fish Species of Eastern Iowa - Characteristics and Senses

A. Introduction

1. This session is aligned to acquaint the first time angler with those important points of emphasis that lead to a fantastic experience fishing in Eastern Iowa and Beyond

B. Objectives

1. Students will come to be knowledgeable regarding identifying general, external characteristics of Eastern Iowa gamefish species.
2. Students will come to be knowledgeable regarding the senses fish possess and how those senses function.
3. Students will come to be knowledgeable regarding the general characteristics of the fish families found in Iowa.
4. Students will come to be knowledgeable regarding the identification of fish species commonly found in the waters of Eastern Iowa.

C. Materials

1. Handouts (One [1] per individual angler)
 - a. *Fish Iowa!* Handout 2-1 - Iowa Fish Families
 - b. FISH IOWA! - Review Sheet 2-1
 - c. FISH IOWA! - Review Sheet 2-2
 - d. *Fish Iowa!* Card Game
 - e. Eight (8) Fish Families ID Posters
 - f. General Fish Anatomy Poster
2. Audio-Visual
 - a. IOWA DNR - BASIC SPIN-CASTING MODULE SUPPLEMENTAL DVD Rom - "Sportfish ID" - Title 1
3. Other
 - a. DVD Player and Projection Unit

D. Time

1. Optimally - Two (2) 60 minute periods

E. General Outline of Activities delivered with the assistance of the manual - *Fish Iowa! A Teaching Module* (pages 25-35)

1. Activity 1: FISH of EASTERN IOWA - A

- a. The Instructor will distribute to each student an individual copy of the following
 - (1) *Fish Iowa! Module* - Unit 2 - Fish Senses and Characteristics - Narrative pages 25 through 35
 - (2) *Fish Iowa!* Handout 2-1 - Iowa Fish Families
 - (3) Eight (8) Fish Families ID Posters
 - (4) General Fish Anatomy Poster

- (5) *Fish Iowa!* Card Game
- (6) *Fish Iowa!* - Review Sheet 2-1, page 37
- (7) *Fish Iowa!* - Review Sheet 2-2, page 38

2. Activity 2: FISH of EASTERN IOWA - B

- a. The Instructor and students will view IOWA DNR - BASIC SPIN-CASTING MODULE SUPPLEMENTAL DVD Rom - "Sportfish ID" - Title 1 (length of 00:00:00 thru 00:07:22)

3. Activity 3: FISH of EASTERN IOWA - C

- a. The Instructor, focusing on pages 25-35 in Unit 2 of the *Fish Iowa! Module*, will relate and discuss
 - (1) General Fish Anatomy
 - (2) Eastern Iowa's fish characteristics
 - (3) Eastern Iowa's fish senses
 - (4) Eastern Iowa's "Special" fish characteristics
 - (5) Under the supervision and guidance of the Instructor, the students will complete the *Fish Iowa!* - Review Sheet 2-1. This is to be completed using a "PAIR, READ & SHARE" comprehension technique (standard practice throughout "*Fish Iowa!* - HOOK, LINE & SINKER")
 - (6) Under the supervision and guidance of the Instructor, the students will complete the *Fish Iowa!* - Review Sheet 2-2. This is to be completed using a "PAIR, READ & SHARE" comprehension technique (standard practice throughout "*Fish Iowa!* - HOOK, LINE & SINKER")

4. Activity 4: FISH of EASTERN IOWA - D

- a. The Instructor, focusing on pages 25-35 in Unit 2 of the *Fish Iowa! Module*, will present, relate and discuss
 - (1) *Fish Iowa!* Card Game
 - (2) Under the supervision and guidance of the Instructor, the students will complete the *Fish Iowa!* Card Game

III. Sessions 3 & 4 - Basic Spin-casting Baits, Lures, Equipment & Techniques

A. Introduction

- 1. This session is aligned to acquaint the first time angler with those important points of emphasis that lead to a fantastic experience fishing in Eastern Iowa and Beyond

B. Objectives

- 1. Students will come to be knowledgeable regarding the functions of the various parts of a spin-casting rod and reel, as well as the terminology associated with spin-casting tackle.
- 2. Students will come to be knowledgeable regarding the basic components of terminal tackle set-ups.
- 3. Students will come to be knowledgeable regarding the basic procedures for casting with spin-casting tackle.
- 4. Students will come to be knowledgeable regarding the procedure(s) for tying basic fishing knots.
- 5. Students will come to be knowledgeable regarding the concept of an aquatic ecosystem.
- 6. Students will come to be knowledgeable regarding the ecological concept and its relationship to which baits and lures are used to pursue different fish species in Eastern Iowa.
- 7. Students will come to be knowledgeable regarding the variety of live and prepared

baits, how to effectively present the and the types of fish for which they are used.

8. Students will come to be knowledgeable regarding different types of artificial lures, the kinds of fish for which they are used and how to effectively present them.

C. Materials

1. Handouts (One [1] per individual angler)
 - a. *Fish Iowa!* Handout 3-1 - Knot Tying Basics
 - b. *Fish Iowa!* Handout 3-2 - Casting Basics
 - c. *Fish Iowa!* - Review Sheet 3-1
 - d. *Fish Iowa!* - Review Sheet 4-1
 - e. *Fish Iowa!* - Review Sheet 4-2
2. Audio-Visual
 - a. IOWA DNR - BASIC SPIN-CASTING MODULE SUPPLEMENTAL DVD Rom - "Basic Spin-casting" - Title 4
3. Other
 - a. DVD Player and Projection Unit
 - b. Knot Tying Boards
 - c. Casting plugs
 - d. Spin-casting rods and reels
 - e. Spin-casting Targets
 - f. Terminal tackle set-ups

D. Time

1. Optimally - Four (4) 60 minute periods

E. General Outline of Activities delivered with the assistance of the manual - *Fish Iowa! A Teaching Module* (pages 41-45 and 55-60)

1. Activity 1: HOW TO FISH IN EASTERN IOWA - A

- a. The Instructor will distribute to each student an individual copy of the following
 - (1) *Fish Iowa Module* - Units 3 & 4 - Basic Spin-casting Baits, Lures, Equipment & Techniques - Narrative pages 41 through 45 the pages 55 through 60
 - (2) *Fish Iowa!* Handout 3-1 - Knot Tying Basics
 - (3) *Fish Iowa!* Handout 3-2 - Casting Basics
 - (4) *Fish Iowa!* - Review Sheet 3-1, page 52
 - (5) *Fish Iowa!* - Review Sheet 4-1, page 62
 - (6) *Fish Iowa!* - Review Sheet 4-2, page 63

2. Activity 2: HOW TO FISH IN EASTERN IOWA - B

- a. The Instructor and students will view IOWA DNR - BASIC SPIN-CASTING MODULE SUPPLEMENTAL DVD Rom - "Basic Spin-casting" - Title 1 (length of 00:00:00 thru 00:10:50)

3. Activity 3: HOW TO FISH IN EASTERN IOWA - C

- a. The Instructor, focusing on pages 41 and 42 in Units 3 & 4 of the *Fish Iowa! Module*, will relate and discuss
 - (1) the Spin-cast Reel
 - (2) Monofilament Line
 - (3) the Spin-cast Rod
 - (4) Types of Terminal Tackle and Safety with such pieces of equipment
 - (5) Under the supervision and guidance of the Instructor, the students will complete the *Fish Iowa!* - Review Sheet 3-1. This is to be completed using a "PAIR, READ & SHARE" comprehension technique (standard practice

throughout "*Fish Iowa!* - HOOK, LINE & SINKER")

4. Activity 4: HOW TO FISH IN EASTERN IOWA - D

- a. The Instructor, focusing on pages 42-43 in Units 3 & 4 of the *Fish Iowa!* *Module*, will relate, discuss and demonstrate
- (1) A simple and specific knot tied for fishing - the Improved Clinch Knot
 - (2) Under the supervision and guidance of the Instructor, the students will practice tying knots. This is to be completed using a knot tying board, as well as continue to learn by the "PAIR, READ (DO!) & SHARE" comprehension technique

5. Activity 5: HOW TO FISH IN EASTERN IOWA - E

- a. The Instructor, focusing on pages 55-60 in Units 3 & 4 of the *Fish Iowa!* *Module*, will relate and discuss
- (1) The Aquatic Ecosystem
 - (2) Common Baits and Lures
 - (3) Set-ups to use with Common Baits and Lures
 - (4) Under the supervision and guidance of the Instructor, the students will complete the *Fish Iowa!* - Review Sheet 4-1. This is to be completed using a "PAIR, READ & SHARE" comprehension technique (standard practice throughout "*Fish Iowa!* - HOOK, LINE & SINKER")
 - (5) Under the supervision and guidance of the Instructor, the students will complete the *Fish Iowa!* - Review Sheet 4-2. This is to be completed using a "PAIR, READ & SHARE" comprehension technique (standard practice throughout "*Fish Iowa!* - HOOK, LINE & SINKER")

6. Activity 6: HOW TO FISH IN EASTERN IOWA - F

- a. The Instructor, focusing on pages 44 and 45 in Units 3 & 4 of the *Fish Iowa!* *Module*, will relate, discuss and demonstrate
- (1) Casting Tips - Spin-casting procedures
 - (2) Spin-casting Do's & Don'ts
 - (3) Under the supervision and guidance of the Instructor, the students will successfully complete the Practice Casting Line-Up
 - (4) Under the supervision and guidance of the Instructor, the students will successfully complete the Target Casting Game

IV. Session 5 - Landing & Caring For The Catch

A. Introduction

1. This session is aligned to acquaint the first time angler with those important points of emphasis that lead to a fantastic experience fishing in Eastern Iowa and Beyond

B. Objectives

1. Students will come to be knowledgeable regarding the procedure for landing a fish including setting the hook, playing the fish and retrieving the fish from the water.
2. Students will come to be knowledgeable regarding the correct procedure for "catch and release" fishing.
3. Students will come to be knowledgeable regarding the various methods of keeping fish fresh in the field.

C. Materials

1. Handouts (One [1] per individual angler)
 - a. *Fish Iowa!* - Review Sheet 5-1 (first page only)
 - b. *Fish Iowa!* *Module* - Written Examination - Used As A Post-test - Appendix L (using Questions 1 -43)

2. Audio-Visual
 - a. IOWA DNR - BASIC SPIN-CASTING MODULE SUPPLEMENTAL DVD Rom - "Landing & Caring For The Catch" - Title 5
 3. Other - none
- D. Time**
1. Optimally - Two (2) 60 minute periods
- E. General Outline of Activities** delivered with the assistance of the manual - Fish Iowa! A Teaching Module (pages 67 and 68)
- 1. Activity 1: HOW TO "CATCH & KEEP" FISH IN EASTERN IOWA - A**
 - a. The Instructor will distribute to each student an individual copy of the following
 - (1) *Fish Iowa! Module* - Unit 5 - Landing & Caring for the Catch - Narrative pages 67 and 68
 - (2) *Fish Iowa!* - Review Sheet 5-1, page 77 (first page only)
 - (3) *Fish Iowa Module* - Written Examination - Used As A Post-test - Appendix L (using Questions 1 -43)
 - 2. Activity 2: HOW TO "CATCH & KEEP" FISH IN EASTERN IOWA - B**
 - a. The Instructor and students will view IOWA DNR - BASIC SPIN-CASTING MODULE SUPPLEMENTAL DVD Rom - "Landing & Caring for the Catch" - Title 1 (length of 00:00:00 thru 00:02:22)
 - 3. Activity 3: HOW TO "CATCH & KEEP" FISH IN EASTERN IOWA - C**
 - a. The Instructor, focusing on pages 67 and 68 in Unit 5 of the *Fish Iowa! Module*, will relate and discuss
 - (1) Landing the fish
 - (2) Catch & Release
 - (3) Keeping the catch
 - (4) Under the supervision and guidance of the Instructor, the students will complete the FISH IOWA! - Review Sheet 5-1, page 77 (first page only). This is to be completed using a "PAIR, READ & SHARE" comprehension technique (standard practice throughout "*Fish Iowa!* - HOOK, LINE & SINKER")
 - 4. Activity 4: POST-TEST**
 - a. Under the supervision and guidance of the Instructor, the students will overview, review and complete the Appendix L - Written Examination of our Fish Iowa Module - Questions 1 through 43
 - (1) Completed using a "PAIR, READ & SHARE" comprehension technique (standard practice throughout "*Fish Iowa!* - HOOK, LINE & SINKER")
- V. IOWA CORE RELATIONSHIP(S)** - Literacy, Mathematics, Science, Social Studies and K-12 21st Century Skills.
- A. Literacy**
1. Language Standards K-5
 - a. Intermediate (3-5) Details and Example - Knowledge of Language
 3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - a. Choose words and phrases to convey ideas precisely.*
 - b. Choose punctuation for effect.*
 - c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion). (L.4.3.)

6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation). (L.4.6.)

- b. Intermediate (3-5) Details and Example - Knowledge of Language
3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.
- b. Compare and contrast the varieties of English (e.g., dialects, registers) used in stories, dramas, or poems. (L.5.3.)

6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., however, although, nevertheless, similarly, moreover, in addition). (L.5.6.)

B. Mathematics

1. Mathematics | Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

a. Intermediate (3-5) Details and Example

Measurement and Data 4.MD

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ... (4.MD.1.)

Operations and Algebraic Thinking 5.OA

Analyze patterns and relationships.

3. Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the

resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so. (5.OA.3.)

C. Science

1. Life Science

a. Intermediate (3-5) Details and Example

Essential Concept and/or Skill: Understand and apply knowledge of organisms and their environments, including:

- Structures, characteristics, and adaptations of organisms that allow them to function and survive within their habitats.
- How individual organisms are influenced by internal and external factors.
- The relationships among living and non-living factors in terrestrial and aquatic ecosystems.

Animals depend on plants. Some animals eat plants for food. Other animals eat animals that eat the plants.

An organism's patterns of behavior are related to the nature of that organism's environment, including the kinds and numbers of other organisms present, the availability of food and resources, and the physical characteristics of the environment. When the environment changes, some plants and animals survive and reproduce, others die or move to new locations.

All organisms cause changes in the environment in which they live. Some of these changes are detrimental to the organism or other organisms, whereas others are beneficial.

D. Social Studies

1. History

a. Intermediate (3-5) Details and Example

Essential Concept and/or Skill: Understand the effects of geographic factors on historical events.

- Understand varying landforms and geographic features and their importance in the development of communities.
- Understand seasons, climate, and weather, environmental change and crises affect social and economic development.
- Understand major land and water routes of explorers.

E. K-12 21st Century Skills

1. Health Literacy

a. Intermediate (3 – 5) Details and Example

Essential Concept and/or Skill: Demonstrate behaviors that foster healthy, active lifestyles for individuals and the benefit of society.

Achieve and maintain health enhancing level of physical activity.

- Identify personal physical strengths and weaknesses.
- Engage in physical activities to improve fitness components.

Practice preventive health behaviors.

- Demonstrate appropriate and effective stress management.
- Assess risk factors that contribute to healthy choices.
- Choose healthy foods.
- Demonstrate behaviors that contribute to holistic wellness for individuals, families and communities.