

Into the Outdoors

FINDING YOUR FISHING SPOT

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In This Activity ...

Students will research, debate, and develop a fishing report about fishable water bodies near them. Their plan will consider habitat needs of fish and angling strategies for various seasons, habitats, and fish.

Educational Partners



GRADE LEVELS

Middle School - Grades 6-8

CONTENT AREA

Natural Resource Management, Life Science, Ichthyology, Environmental Science, Habitat Management

UNIT THEME

Outdoor Recreation Planning

TOPIC

Fish Habitat, Angling, Fish Biology, Angling Methods, Regulations, Environmental Science

TIME REQUIRED

Three, 45-minute sessions

**OVERVIEW**

Millions of people in the United States pursue fish on their angling adventures in oceans, rivers, and lakes. Fishing is an outdoor sport that strengthens families. It offers memorable experiences with nature and people on the water, exercise, and nutritious meat that is loaded with protein and essential nutrients. Often, there is a big misconception that you have to travel by boat into wild, remote areas to get to where the fish are. However, 50% of people in the world live about 3 km from freshwater bodies while 10% of the global population lives further than 10 km away from water. That means most people today have easy access to fishing – including people who live in urban areas.

Fishing reports are great resources for new and experienced anglers to locate fishing spots near them. These reports reveal fishing locations within counties and states while also reporting important tips such as fishing seasons, access points, regulations, and habitat. State wildlife agencies will release yearly fishing reports that also give “forecasts” so anglers and families can plan ahead for their fishing adventures.

In this lesson, students will be assigned water bodies within their school’s county. They will then research and visit their location to design a fishing report for that water body that includes useful fishing tips, management strategies, fish habitat features, and references for anglers. The students will present their fishing reports to the class and debate on the accuracy, creativity, and usefulness to anglers and families.

**Enduring Understanding:**

Students will understand quality habitat features that support fish populations and angling opportunities. Students will also discover pathways to locating fishing spots and experts.

Content Objectives:

Students will decode the key components that determine quality fish habitat and recreational opportunities. They will also research, debate, and design a fishing report that promotes outdoor recreation and healthy angling and management of fisheries.

Learner Outcomes:

Students will use online research, references, and field trips to determine facts about their fishing spot and develop their fishing report. They will also present and discuss key fish habitat, angling methods, and resources that families and anglers can pursue to find fishing locations near them.

Process Objectives:

Students will work in small and large groups to process new information and use evidence to come to conclusions.

MATERIALS NEEDED:

(for each group, for each student)

- Access to computers and the internet
- Finding your Walleye Fishing Adventure video and background information at: <http://intotheoutdoors.org/topics/finding-your-walleye-adventure/>
- Pre-lesson Student Worksheet with questions to fill in while watching the video
- Student Worksheets for each group

PROCEDURES

Session 1

Before watching the ***Finding your Walleye Fishing Adventure*** classroom video or reading the website background information, ask students what they already know about fishing opportunities in their area. Ask students what kind of positive experiences or environmental science they may discover on a fishing adventure. Lead a short discussion on how new anglers can prepare for their first fishing trip.

Have students download or print and distribute the **Pre-Lesson Student Worksheet** (copy contained in the web link). Instruct students to fill in the worksheet while watching the video. Go over the questions with the students before viewing so they know what to look and listen for.

After watching the video, review and discuss the answers to the worksheet questions as a class. Next, divide the whole class into small groups of four students. Then assign each group a fishing location within the school's county. Teachers may discover fishing locations in their county by searching online for "fishing reports" in their state, consulting a state wildlife agency, or downloading a free fishing app (which pinpoints where people have caught fish).

Have students download and print, or hand out to each student, their ***Finding your Fishing Spot Worksheet*** (copy contained in the web link). Ask them to review the details and assignments of the worksheet in preparation for Session 2.

Session 2 – Team Research & Fishing Report Development

In their assigned groups, have students perform online research from links provided and from other sources they discover. Students may also ask local experts, state wildlife agencies, or download fishing apps to learn more about their fish locations. The worksheets give instructions and research options that will guide the students in their information gathering. Encourage students to visit their fishing location and document their findings with photos or video. The small groups can discuss and design their fishing report into a slideshow presentation. Inform each group they will present their fishing report to the class and their presentation must be supported by factual research and include media (video, images, artwork, clipart).



Session 3 – Fishing Report Presentations and Class Debate

Have each group present their **Fishing Report** with supporting research and findings of their fishing spot. Limit each group to four minutes presentation time. After each group presents their report, give students four minutes to ask questions and discuss the report's accuracy, creativity, and usability for anglers. Then have each group review or "forecast" each group's report.

After all the groups present their plans, open the floor to discussion on the key habitat and angling tips they noticed during the presentations. Ask students if any of the opportunities excited or surprised them, and what resources they learned that they can use to find their fish. Then conclude by tallying and averaging the groups scores to find the winning fishing location. The teacher may compile their fishing reports into a large report that may be distributed to the fishing locations as reference guides.

ASSESSMENT

- Students will be informally assessed based on their participation within their groups and during class presentations and discussions.
- Teachers could collect the Pre-Lesson Student Worksheets and formally assess the discussion notes students took during the video to check for completion.
- Students can be assessed on meeting the formal learning objectives based on how thoroughly students completed their group worksheets and study guides.
- Students can be evaluated on their presentations during Session 3.

EXTENSION ACTIVITY

Challenge the winning group and students interested in fishing to arrange a field trip to their fishing location with a fishing expert. Have the students document the trip and expand further upon their fishing report with pictures of their catches, habitat, and fishing strategies. Students may share their fishing report online, on fishing apps, or share with other schools in the county.



RESOURCES FOR TEACHERS & STUDENT RESEARCH

- <https://www.takemefishing.org/where-to-fish-and-boat/>
- <https://www.fws.gov/refuges/fishingguide/refuge-opportunities-for-all-anglers/great-refuge-fishing-spots/>
- <https://www.takemefishing.org/freshwater-fishing/>
- [types-of-freshwater-fishing/river-fishing/](https://www.takemefishing.org/types-of-freshwater-fishing/river-fishing/)
- <https://www.fws.gov/refuges/fishingguide/tips-for-anglers/>
- <https://kidsfishing.us/where-you-fish/>

STANDARDS

The following **National Common Core Standards** can be met teaching:

FINDING YOUR FISHING SPOT

Grade 6:

CCSS.ELA-LITERACY.RI.6.1	Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.6.2	Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
CCSS.ELA-LITERACY.RI.6.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.
CCSS.ELA-LITERACY.RI.6.7	Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
CCSS.ELA-LITERACY.W.6.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-LITERACY.W.6.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.W.6.6	Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.
CCSS.ELA-LITERACY.W.6.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
CCSS.ELA-LITERACY.W.6.8	Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.
CCSS.ELA-LITERACY.W.6.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
CCSS.ELA-LITERACY.SL.6.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.6.2	Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
CCSS.ELA-LITERACY.SL.6.3	Delineate a speaker’s argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.
CCSS.ELA-LITERACY.SL.6.4	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.
CCSS.ELA-LITERACY.SL.6.5	Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.
CCSS.ELA-LITERACY.SL.6.6	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
CCSS.ELA-LITERACY.L.6.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-LITERACY.L.6.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-LITERACY.L.6.3	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
CCSS.ELA-LITERACY.L.6.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.
CCSS.ELA-LITERACY.L.6.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
CCSS.ELA-LITERACY.L.6.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Grade 7:

CCSS.ELA-LITERACY.RI.7.1	Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.7.2	Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.
CCSS.ELA-LITERACY.RI.7.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.
CCSS.ELA-LITERACY.W.7.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-LITERACY.W.7.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.W.7.6	Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.
CCSS.ELA-LITERACY.W.7.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.
CCSS.ELA-LITERACY.W.7.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
CCSS.ELA-LITERACY.W.7.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
CCSS.ELA-LITERACY.SL.7.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others’ ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.7.2	Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.
CCSS.ELA-LITERACY.SL.7.3	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.
CCSS.ELA-LITERACY.SL.7.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.
CCSS.ELA-LITERACY.SL.7.5	Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
CCSS.ELA-LITERACY.SL.7.6	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
CCSS.ELA-LITERACY.L.7.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-LITERACY.L.7.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-LITERACY.L.7.3	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
CCSS.ELA-LITERACY.L.7.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.
CCSS.ELA-LITERACY.L.7.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
CCSS.ELA-LITERACY.L.7.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Grade 8:

CCSS.ELA-LITERACY.RI.8.1	Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.8.2	Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.
CCSS.ELA-LITERACY.RI.8.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
CCSS.ELA-LITERACY.W.8.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-LITERACY.W.8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.W.8.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.
CCSS.ELA-LITERACY.W.8.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
CCSS.ELA-LITERACY.W.8.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
CCSS.ELA-LITERACY.W.8.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.

CCSS.ELA-LITERACY.SL.8.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.
CCSS.ELA-LITERACY.SL.8.3	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.
CCSS.ELA-LITERACY.SL.8.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
CCSS.ELA-LITERACY.SL.8.5	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.
CCSS.ELA-LITERACY.SL.8.6	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
CCSS.ELA-LITERACY.L.8.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-LITERACY.L.8.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-LITERACY.L.8.3	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
CCSS.ELA-LITERACY.L.8.4	Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.
CCSS.ELA-LITERACY.L.8.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
CCSS.ELA-LITERACY.L.8.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Grades 6-8:

CCSS.ELA-LITERACY.RST.6-8.1	Cite specific textual evidence to support analysis of science and technical texts.
CCSS.ELA-LITERACY.RST.6-8.2	Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.
CCSS.ELA-LITERACY.RST.6-8.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.
CCSS.ELA-LITERACY.RST.6-8.7	Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
CCSS.ELA-LITERACY.RST.6-8.8	Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.
CCSS.ELA-LITERACY.RST.6-8.9	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.
CCSS.ELA-LITERACY.WHST.6-8.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
CCSS.ELA-LITERACY.WHST.6-8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

- CCSS.ELA-LITERACY.WHST.6-8.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
- CCSS.ELA-LITERACY.WHST.6-8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.
- CCSS.ELA-LITERACY.WHST.6-8.7 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
- CCSS.ELA-LITERACY.WHST.6-8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation
- CCSS.ELA-LITERACY.WHST.6-8.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.

Next Generation Science Standards for ...

FINDING YOUR FISHING SPOT

MS-LS2-1. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. [Clarification Statement: Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources.]

MS-LS2-2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems. [Clarification Statement: Emphasis is on predicting consistent patterns of interactions in different ecosystems in terms of the relationships among and between organisms and abiotic components of ecosystems. Examples of types of interactions could include competitive, predatory, and mutually beneficial.]

MS-LS2-4. Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations. [Clarification Statement: Emphasis is on recognizing patterns in data and making warranted inferences about changes in populations, and on evaluating empirical evidence supporting arguments about changes to ecosystems.]

