

ACTIVITY 2: READ ABOUT FISH FARMING IN THE GREAT LAKES

As natural habitats degrade, invasive species disrupt food sources, and the culinary demand for fish impacts the naturally-occurring supply, the need for the fish-equivalent of cattle ranching, known as aquaculture, continues to increase. The so-called industry of fish farming has grown in recent decades, including in the Great Lakes, and is now being studied for its impact, costs, and benefits in the region. Students will read about an ongoing study into the aquaculture of the Great Lakes.

In this activity, students will use a **Think Pair Square Protocol** for discussing what they will read about this very topic.

First, have students partner up and distribute the article [Grant Funds Study of Great Lakes Aquaculture](#) by Carin Tunney from *Great Lakes Echo*. Allow time for students to individually read the article, and have them jot down three things they took away from the article using the **Rose Thorn Bud Protocol**—in their notebook or using the handout.

Then, give students time after reading to discuss the article that they read with their partner. Have students share their rose, thorn, and bud with each other, including how those points connect to each other. The pair should come up with a statement to summarize all of their article takeaways.

Next, have two student pairs join up, standing near each other to form the four corners of a square, to discuss the article and what they talked about in their pairs. Encourage them to come to a consensus about which point they found most important or interesting in the article.



Last, have each group craft a summary statement of the most important point from their discussion and ask for a volunteer in each group to share that key point with the whole group. As student groups share their most important point, record their ideas on the board and have students copy the list of student ideas down into their notebooks. Once the shareout is complete, ask students to return to their groups and discuss one last question based on the article:

What might make you supportive or opposed to expanding aquaculture in the Great Lakes?

You can keep this as a class discussion based on the article itself or, after giving the groups some time to discuss this question, invite them to further research the topics, points of interest, or themes discussed in the article by generating a research question, identifying additional sources, and presenting their findings.

Teaching Tip:

If the reading level of the article is going to be tough for some students to read individually, have partners or small groups read the article together aloud while each follows along, or the teacher might read the article to the entire class.