

Title: Tree Tender – Bingo! I Got It!!!

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Abstract:

This is a Bingo review activity. It allows students to relate real life examples to major ecological services provided by organisms found in the Tree of Life. The teacher will read/show examples of organisms that provided ecological services. Students will participate in a discussion of each example organism and match its major ecological service found on their bingo board. This activity can be used as a starting engagement piece or as a review after topics are covered.

Subject, Grade, Level:

Biology, Marine Science, Environmental Science), grade: both middle and high and level: any.

Learning objectives:

- Students will be able to identify ecological services provided by different organisms from the tree of life.

Ecological Services included in activity: food, pollination, waste decomposition, erosion control, water purification, medicinal resources, habitat for other species, eco-tourism, spiritual/religious purpose, raw materials, carbon sequestration, energy, air quality, climate control, genetic diversity, mental health, biological control (pest/diseases)

Timeframe:

Activity length can vary by number of rounds you play. Each round should take 10-20 minutes depending on depth of discussion.

List of materials:

- 1. Printed copies of Bingo boards (one per student)*
- 2. Bingo place pieces (pennies, small scraps of paper, beans, ect.)*
- 3. Teacher copy of examples and answers (you can cut these out and display them under a document camera or just read them out loud)*

Procedure and general instructions (for instructor). REQUIRED.

Hand out a bingo board to each student and supply students with small bingo pieces to cover the examples on board when they are called out. Teacher will then read out examples in any order and lead class discussion on which type of ecological service each organism is providing. First student to get 5 examples in a row on their board is the winner. Multiple variations in the way you play bingo can increase student participation (ex. 4-corners, 9-square, and diamond

patterns). The number of round you play can also vary. It is recommended that you mark the examples you have already used so that you do not repeat them and provide new examples each time to increase critical thinking.

Procedure and general instructions (for students).

Teacher can read these out loud, printing them is not necessary.

- *Collect a Bingo Board and Bingo Pieces (to cover board)*
- *Review the examples on your board, you may have different examples of ecological services than your neighbor.*
- *Listen/Look for Bingo pattern you are trying to achieve (ex. tree, diamond, 4-square or 4-corner pattern)*
- *Participate in discussion to determine which ecological service category the example is describing.*
- *If you achieve the correct pattern, yell out BINGO!*
- *If you hear another student yell out BINGO! DO NOT CLEAR YOUR BOARD, until the teacher has verified that they did in fact get the correct pattern.*