Human Activity and the Environment – Teacher's Kit

Slide set #2: What are ecosystem goods and services?



Release date: September 2014



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- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the Statistics Act
- E use with caution
- F too unreliable to be published
- significantly different from reference category (p < 0.05)

Set #2: What are ecosystem goods and services?

Set #2 of a three-part series, this presentation and related learning materials include the following activities:

- Learners discuss possible understandings of economic goods and services.
- Learners identify goods and services present in images of ecosystems.
- Learners explore the impact of human actions and ecosystem changes on ecosystem goods and services (EGS).

Key learning outcomes:

- understand economic goods and services
- understand ecosystem goods and services
- understand the importance of studying ecosystems

Intended audience: grades 7 to 12 social studies, geography, science, biology, and environmental education classes; introductory post-secondary

These PowerPoint presentations and corresponding teacher notes and activities accompany and support the learning activities for "What are ecosystem goods and services?" and the Statistics Canada publication, *Human Activity and the Environment 2013: Measuring ecosystem goods and services in Canada*.

Title slide

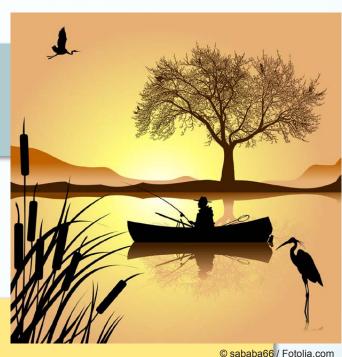
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kjay, 2014, Douglas Fir Tree Silhouette, http://us.fotolia.com/id/5470456 (accessed May 28, 2014).

Think about the task

Today's task

What goods and services does this ecosystem provide?



What will I learn?

- how to identify goods and services
- how to identify goods and services found in ecosystems
- why it might be important to study ecosystem goods and services

Slide 1

References

sababa66, 2014, fisherman on the boat, http://us.fotolia.com/id/57707069 (accessed May 28, 2014).

Explore the ideas

What *goods* might each business sell?

What **services** might each business sell?

ROLAND'S TENNIS ACADEMY

- improve your game with pro coaching
- visit our pro shop for the latest in racquets and other tennis gear
- custom racquet repair

Wally's Electronics Warehouse

From personal devices to home entertainment systems, we have all the latest and greatest gadgets!

Slide 2

THINK about these business ads

TALK to a partner

SHARE with the class



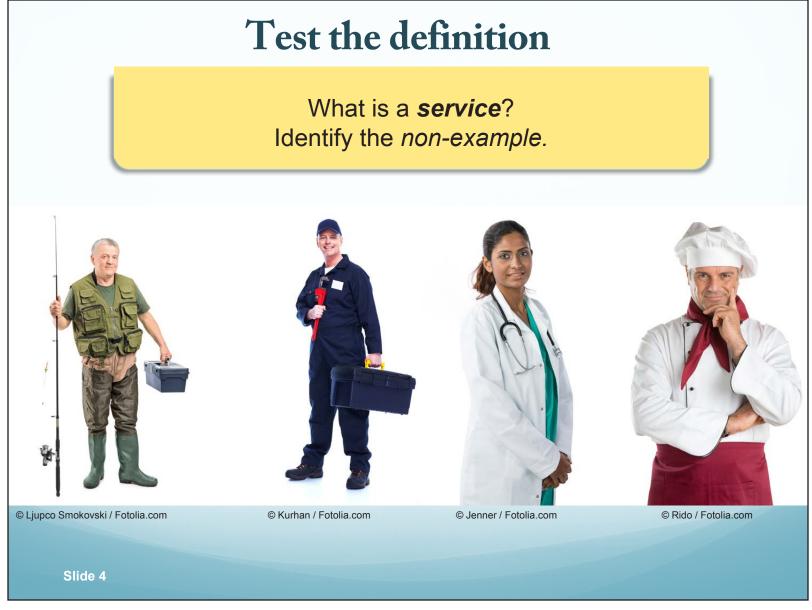
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Extend the definition

Ecosystems also provide goods and services. Which are *goods*?

Which are **services**?



L. Hislop / GRID-Arendal



J. Galloway / U.S. Geological Survey



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THINK about these images

TALK to a partner

SHARE with the class

References

Slide 6

Hislop, Lawrence, 2010, Tree stumps, Canada, http://www.grida.no/photolib/detail/tree-stumps-canada_18fd (accessed April 22, 2014).

Galloway, Joel M., 2011, Missouri River, U.S. Geological Survey, http://gallery.usgs.gov/photos/06_28_2011_lpg6Jvu3ID_06_28_2011_18 (accessed April 24, 2014).

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Three categories of EGS



Provisioning: the goods and materials provided.

Regulating: the services of regulating climatic, water, bio-chemical and biological processes.

Cultural: services provided through recreation, knowledge, relaxation and spiritual reflection.

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Slide 7

References

kjay, 2014, Douglas Fir Tree Silhouette, http://us.fotolia.com/id/5470456 (accessed May 28, 2014).

Categorize the EGS

In which categories do these EGS belong: provisioning, regulating or cultural?





J. Galloway / U.S. Geological Survey



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Slide 8

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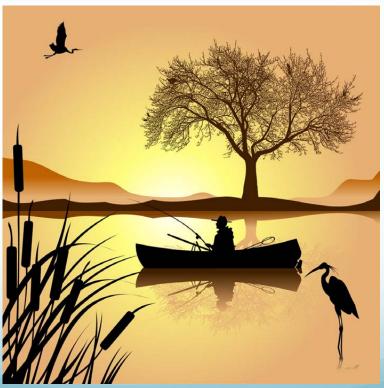
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Do ecosystems have goods and services?

What goods and services might be found in this ecosystem?



Slide 9

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References

sababa66, 2014, fisherman on the boat, http://us.fotolia.com/id/57707069 (accessed May 28, 2014).

How has human activity affected the goods and services provided by this ecosystem?



LOOK at the image carefully

DESCRIBE what you see to your partner

activity has affected the goods and services provided

L. Hislop / GRID-Arendal

Slide 10

References

Hislop, Lawrence, 2010, Fallen trees in a plantation, Canada, http://grida.no/photolib/detail/fallen-trees-in-a-plantation-canada_56e1 (accessed April 24, 2014).