Shellfish Farming is Sustainable

- *Shellfish filter microscopic plant cells from the water column.*
- *Shellfish feed low on the food chain.*
- *No fertilizers, feeds, herbicides, drugs, chemicals, or antibiotics are used.*

Shellfish aquaculture has proven to be sustainable because it does not damage the environment or jeopardize future productivity. Annual harvests are made possible by replanting hatchery-reared seed.

An oyster farmer tends his crop at low tide.

East Coast Shellfish Growers Association

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For more information please visit our website:
www.ECSGA.org

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Sea Grant
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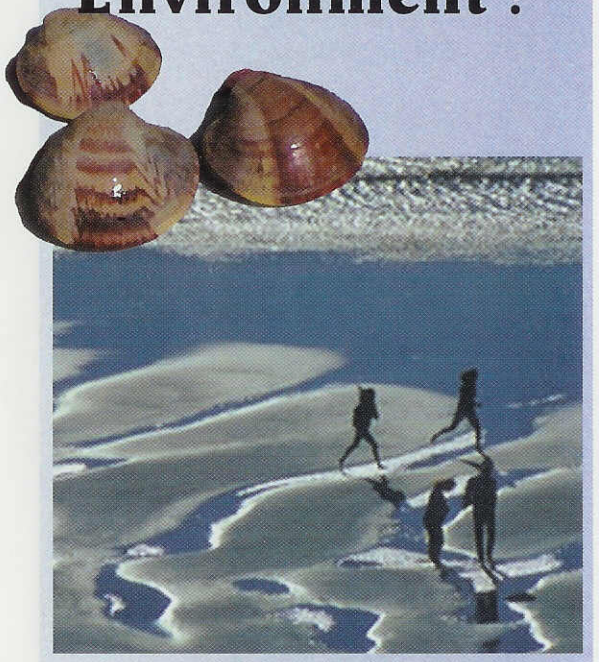
Did you know?

Shellfish Aquaculture is GOOD for the Environment !



- *Filter-feeding shellfish improve water quality.*
- *Shellfish farming provides habitat for fish and improves species diversity.*
- *Shellfish aquaculture is sustainable and good for the environment.*

Shellfish Clean the Water by Filter Feeding

- *A single oyster can clear over 15 gallons a day, retaining particles as small as 2 microns.*
- *A small oyster farm in Narragansett, RI clears 30 to 100 million gallons each day.*

✔ Reduces turbidity
✔ Improves light penetration
✔ Improves water quality
✔ Reduces anoxia (low oxygen)

Shellfish improve water quality as they feed by filtering microscopic particles from the water. This removes problematic sediments and phytoplankton and their associated nutrients. Some of the nitrogen is incorporated into protein and the rest is deposited on the bottom, where it can be consumed by worms and other organisms.

Shellfish Remove Nitrogen

- *Shellfish remove microscopic plants as they feed.*
- *Nitrogen contained in shellfish tissues is removed when animals are harvested.*
- *Shellfish feeding stimulates denitrification.*
- *Improved light penetration and reduced nitrogen help eelgrass recover.*

Photo courtesy of Jerry Prezioso

As both water clarity and light penetration are improved, the eelgrass is able to recover in waters that have not supported seagrasses for decades. Clearly shellfish aquaculture should be an element of any eelgrass restoration project.

Shellfish Aquaculture Stimulates Diversity

- *Recent studies reveal that shellfish aquaculture can improve species abundance and diversity.*
- *Shells and aquaculture structures provide habitat for juvenile fish, crabs and other organisms.*

Cultured shellfish have gotten a thumbs up from environmental groups such as **Environmental Defense**, the **Chef's Collaborative's** *Seafood Solutions*, and others. These groups work to steer consumers towards sustainably harvested seafoods. Oysters are a *keystone species*, meaning they control the environment in which they live by cleaning the water, while the spaces between their shells provide habitat for juvenile fish, crabs, and the organisms on which they feed.