"Eating is an environmental act."

Wendell Berry

Environmental Literacy and Agriculture: Program Resources for K-12



Please see www.maefonline.com for updates to this Resource Guide!

National Center for Appropriate Technology

Students and teachers will find inspiration, technical advice, project ideas, grant opportunities, and education on a wide variety of topics that all fall under sustainable energy and food systems. NCAT is now in its third decade, with regional offices across the country and a large web-based presence. Its goals include assisting rural communities adapt and transform energy, economic and food systems that are affordable and effective, while addressing issues of climate change, health, and community vitality.

Schools can benefit from **NCAT** by researching programs and projects in:

- Reducing carbon and other greenhouse gas emissions
- Installing renewable energy technology
- Small-scale sustainable agriculture projects for energy production
- Irrigation and water conservation
- Managing energy risks

E-Lit Standards

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Webpage: www.ncat.org

Additional programs and websites: http://www.ncat.org/websites.php

E-Newsletter subscription:

https://www.thedatabank.com/dpg/427/personal2.asp?formid=signup

The Lambi Fund

Students and teachers can look to this hard-working organization to provide boots-on-the-ground examples of rebuilding infrastructure and rural communities with cost-effective strategies for sustainable agriculture, economic justice, and renewable energy. Students can explore a wealth of projects Lambi Fund supports and facilitates to inspire their own thinking about linked social-environmental systems. Grounded in sustainable agriculture, Lambi Fund projects provide technical and economic assistance in sustainable development, micro-loans and community credit, natural resources conservation, reforestation, and leadership training for women in rural communities. Partner schools are welcomed!

Schools can benefit from Lambi Fund by researching programs and projects in:

- Reforestation, soil conservation
- Local and regional grain, fruit, coffee, and vegetable production
- Seed banks
- Community lending
- Tool banks, appropriate technology

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Webpage: www.lambifund.org

Ag In The Classroom (AITC)

The AITC website offers teachers a huge collection of lessons and short units on agriculture grouped by state or topic in the Teacher Center. Additional resources include select links and published articles on agricultural literacy and agricultural education conferences. Students are provided with their own searchable databases including Kid Zone and Teen Scene. AITC is represented in every state. The Maryland Agricultural Education Foundation (MAEF) houses AITC for Maryland.

Schools can benefit from **AITC** resources for:

- Agriculture lessons
- Commodity, economic, production issues and processes
- Agriculture history and regional commodity information
- Teacher training, conferences, and networks
- School gardens
- Agribusiness

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Website: www.agclassroom.org

Future Farmers of America is a dynamic and historic organization that helps students prepare for a career in food systems, farming, and natural resources, through agricultural education and leadership development. Many Maryland high school agriculture programs are affiliated with FFA and FFA ag teachers in your school district or county are invaluable resource people beyond the ag classroom. FFA student members are very active in their communities, going above and beyond to help address local and regional food system issues while preparing to serve as the next generation of farmers and agriculturalists.

Schools can benefit from collaborating with local and state **FFA** through;

- PALS mentoring program that links elementary and middle schools students to local FFA chapter students to learn about ag science and business
- National Collegiate Agricultural Ambassadors who visit schools for workshops and presentations in ag science, food systems
- Feeding the World-Starting At Home issues and action project

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Website:

National FFA: www.ffa.org

Feeding the World – Starting At Home:

https://www.ffa.org/Programs/Outreach/feedingtheworld/Pages/default.aspx

The Edible Schoolyard Project

ESY has developed a world-class school-based sustainable food and nutrition systems program with a strong web presence that includes a networking site, resources, searchable databases for curriculum and projects, and parent's page to support cafeteria projects and volunteering. ESY Academy Berkeley offers three day teachers/professional training at their California campus.

Schools can benefit from ESY resources in:

- Classroom agricultural and nutrition education
- School farm, garden, and farm-to-school connections
- Professional development
- Networking
- Sustainability education

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Website:

http://edibleschoolyard.org

Future Harvest – Chesapeake Alliance for Sustainable Agriculture

This very active and growing network of Mid-Atlantic farmers and agriculturalists represent a movement of re-localizing food and farming systems across the country. Many teachers and administrators attend all or part of the annual Future Harvest Conference held each winter and come away with inspiring ideas for school gardens and farms, food services, Farm to School, speakers, and applied farming ideas in livestock, produce and fiber, and new farmer training.

Schools can benefit from networking with Future Harvest, CASA by:

- Attending a Future Harvest regional workshop
- Sharing consumer resources with students and families
- Learning about stewardship and farming at the annual conference
- Connecting with local farmers

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Website:

Future Harvest - Chesapeake Alliance of Sustainable Agriculture

http://www.futureharvestcasa.org

National Environmental Education Foundation

NEEF recognizes the importance of teaching environmental science, issues, and innovation using agricultural/natural resource STEM strategies. National Environmental Education Week website contains searchable databases and rich networks of programs, organizations and instructional ideas, including a very useful resource list for school garden curriculum.

Schools can benefit from NEEF and EEWeek resources by:

- Using the rich databases to customize a school garden curriculum
- Getting involved in EEWeek events and projects
- Connecting with resource partners to enhance or build E-Lit curricula

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Website:

NEEF - www.eeweek.org

School Garden Curricula -

http://www.eeweek.org/resources/garden_curricula.htm

Maryland Farm-to-School

This program connects school system food services to local farmers who can provide Maryland schools with fresh, nutritious product in season. Students and teachers can learn about how schools and institutions interact directly with local farmers. Understanding the benefits of local purchasing, fresh foods, and how food systems work at local scales is important when exploring environmental issues that affect individual health, ecosystem services, community economics, and agriculture.

Schools can benefit from the Maryland Farm-to-School Program by:

- Including F2S education during F2S Week and throughout the year
- Learning and demonstrating healthy eating habits
- Connecting with local farmers for a farm tour and field experiences
- Linking food system awareness to Green School applications and student action projects

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Website:

 $\underline{http://www.mda.state.md.us/mdfarmtoschool/index.php}$

Maryland Agricultural Education Foundation

MAEF serves Maryland schools in a variety of ways. Elementary schools may reserve a Mobile Science Lab for a week of agriculture and/or aquatics education, or schedule an Ag Returns to the City program. MAEF serves secondary schools as a consulting resource to help establish or enhance agriculture education on campus, arrange farm-based education tours and experiences, and work with all teachers directly or in professional development teams.

Schools can benefit from MAEF through:

- Utilizing the Mobile Science Labs for elementary grades
- Establishing local agricultural community resources for school initiatives
- Providing agricultural professional development to teachers and staff
- MAEF grants and scholarships

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Website:

http://www.maefonline.com

Farm Based Education Association

This is a national free membership network of farms and agricultural education centers that offer food systems education from field to table. An annual farm-based education conference is held in Vermont every fall, and many states, including Maryland, offer state network workshops.

Schools can benefit from FBEA by:

- Locating a FBEA program nearby for field trips and tours
- Using FBEA as a consulting resource for establishing school farms
- Attending a local FBEA workshop or event
- Enhancing school-based agriculture education with FBEA resources

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Website:

http://www.farmbasededucation.org