

INTRODUCING AGROECOLOGY

Zachary Brym, Hamutahl Cohen, Hannah Wooten, Emma Matcham, and David Outerbridge

AGROECOLOGY—Farming that works with nature to maintain and balance reliable production with biodiversity, long-term environmental well-being, and social responsibility.

Agroecologists aim to address negative environmental and social consequences of agriculture and build in benefits for nature and society through a deep knowledge of the unique local and regional aspects of place, plants, and people.

Agroecology designs and practices support the principles of:

- **productivity** (biomass, carbon, nitrogen, yield, and income)
- **diversity** (plants, animals, microbes, fungi, and cultures)
- **resilience** (maintain or rebound in response to hardship or disturbance)
- **systems thinking** (reflection and planning for broad connections)

AGROECOSYSTEMS—Ecosystems managed for production of food, fuel, fiber, or medicines. These ecosystems include the interconnected components of agriculture and nature. Environmental and biological offerings of agroecosystems are broadly considered as ecosystem services.



AGROECOLOGICAL PRACTICES TO CONSIDER

Add plant diversity. Go beyond a focal crop. Planting hedgerows within crop fields or forested buffers around field boundaries can lessen the movement and erosion of soil, slow and filter the movement of water, disrupt extreme temperatures and winds, and encourage and increase the movement of wildlife.

Add animal diversity. Integrate livestock. Insect and wildlife diversity can increase the likelihood that beneficial insects will be present to pollinate crop flowers or predators will be present to feed on harmful pests.

Establish corridors. Connect biodiversity. Corridors of different sizes and composition can help the movement of pollinating insects or large wildlife such as the Florida panther.

Reduce. Reuse. Recycle. Adaptive and resource-conscious management can increase the internal cycling of energy, nutrients, and matter for conservation, restoration, and regeneration, or decrease the internal cycles and external pressures of environmental and biological pests.

Support humanity. Provide a living wage and healthy food. Food and shelter are human rights that enlist land managers to be stewards of the land and their community.

GETTING STARTED

Interested in developing an agroecological strategy for your farm, garden, or local food system?

1. **Map the agroecosystem.** Draw and list environmental, biological, and economic resources on your farm and those available externally. Consider lands, zoning, infrastructure, and equipment.
2. **Plan your agroecosystem.** Define productivity, biodiversity, and resilience targets. Balance target outcomes, expectations, and risks with agroecological design and practices. Detail and map your agroecosystem target for 1 year and 5 years in the future.
3. **Take action.** Design, develop, and deploy place-based agroecological solutions. Try an agroecological practice and evaluate the effectiveness of your plan and resulting changes to your agroecosystem.

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