RECONCILING NATURE AND AGRICULTURE:

RESTORING NATURE AND IMPROVING BIODIVERSITY THROUGH AGROECOLOGICAL FARMING PRACTICES

Agroecology Europe

NO PLOWING AND PERMANENT SOIL COVER

Halting plowing and maintaining permanent soil cover with main crops and cover crops enhance soil life (bacteria, fungi, earthworms, etc.), serving as a trophic base for numerous other organisms, including birds.

DEVELOP A DENSE ECOLOGICAL NETWORK

A dense ecological network includes grass strips arranged across the entire farmland including wildflower meadows. This ecological network benefits predators and parasitoids of crop pests and has a positive impact on birds (grey partridge, songbirds like the red-backed shrike) and mammals (hare, roe deer, etc.).

DEVELOP A DIVERSE HEDGE NETWORK

A diverse hedge network with around twenty species provides pollen and nectar from January/February to June/July and fruits from June to December. This benefits pollinating insects and frugivorous birds.

IMPLEMENT ECOLOGICAL ELEMENTS

The implementation of other ecological elements like ponds, lakes, stone and wood piles, etc., is encouraged.

For more information:

Jeanneret, P., Aviron, S., Alignier, A. et al., 2021, Agroecology landscapes. Landscape Ecol 36, 2235–2257
link here

NO HERBICIDE

The absence of herbicides allows modest weed growth, which is sufficient to support birds (grey partridge) and insects.

NO INSECTICIDES

The absence of insecticides promotes the development of insects and arachnids. providing various services beyond pest control and pollination such as nutrient cycling, and food for other wildlife species like birds, amphibians, and some mammals.

COMPLEX MIXTURE OF COVER CROPS

Complex mixtures of cover crops like Biomax, sown between main crops, provide habitat for crop allies (especially insects), pollinators, migratory or wintering birds, mammals, etc.

CROP ROTATION DIVERSITY

A variety of crop rotations offer multiple food sources, such as seeds (flax, hemp, traditional cereals, corn, etc.) and tubers, while providing refuge cover for animals at all times.

For more information:

Wezel, A. et al. 2014. Agroecological practices for sustainable agriculture. A review. Agronomy for Sustainable Development, 34. 1-20. 10.1007
link here

CROP AND LIVESTOCK INTEGRATION

The integration of crop and livestock farming involving ruminants requires the presence of permanent grasslands (typically hedgerow-based) and temporary ones, which serve as a food resource for numerous insects and birds, among others.

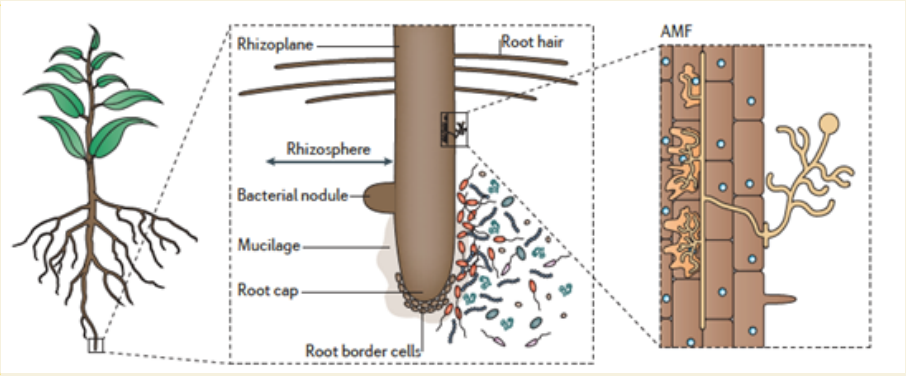
DID YOU KNOW?

The presence of ruminants attracts insects that are consumed by swallows.

Hirundo rustica

The red kite hunts in recently mowed meadows.

Milvus milvus



Source: Philippot L. et al (2013)

The Rhizosphere is the foundation of soil food chains.

More information
www.agroecology-europe.org

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