







## Principles to Consider for Enhancing Monarch Habitat\*

Within the agricultural landscape in the Upper Midwestern United States

#### Site Selection

Monarch butterflies require milkweed to reproduce and a variety of flowering plants for nectar. Their habitat can fit into many niches on the agricultural landscape, including conservation lands, grazing lands, rights-of-way, field margins, and yard and garden areas.

- Maintain existing milkweed stands outside of production areas.
- Select restoration sites for successful establishment and management as free of weeds as possible. Avoid sites with species that are exotic, invasive, and/or potentially resistant to herbicides. Sites with weeds present can be utilized with proper site preparation and management.
- Consider using monarch and pollinator friendly practices, including land enrolled in private land conservation programs.

#### **Planting**

Promote the successful establishment of milkweed for monarch breeding and other nectar plants beneficial to adult monarchs and other pollinators.

- Determine the best mix of milkweed and nectar plants to attract a variety of pollinators in addition to monarchs, using seeds grown as locally as possible.
- Prepare the seed bed to support successful plant establishment.

#### Habitat Conservation/Management

Maintain and monitor existing milkweed stands. Consider ways to incorporate monarch and other species' needs into land management practices.

- Avoid overspray of habitat with herbicides and insecticides. Follow application guidelines when managing weeds and insect pests and consider field margins as sensitive areas.
- Manage roadside/ditches to promote habitat plan mowing and any use of herbicides to avoid time periods when monarch eggs and caterpillars are present.
- Adopt grazing and burning practices that promote beneficial plants.

#### **Promotion**

Consider promoting the creation of monarch habitat in the following ways to help reach the goal of a stable monarch population.

- Establish a Monarch Waystation (Monarch Watch) or Certified Wildlife Habitat (National Wildlife Federation).
- Establish an on-farm monarch habitat demonstration site and share lessons learned.

#### Observation

Milkweed can be difficult to grow from seed and will require site maintenance to successfully establish. The photos here show







milkweed at three stages of development, displaying shoot, flower, and seed.

### **USDA PROGRAMS**

In 2015, the USDA launched a 10-state targeted monarch conservation effort and opened enrollment in the CRP and other USDA conservation programs.

See your local USDA Service
Center for information on how to
get involved, and for
recommendations on how to
provide monarch habitat on your
CRP land or land enrolled in other
USDA conservation programs.



# FOR MORE INFORMATION

\*The Monarch Collaborative has compiled a list of technical and practical resources to support the principles listed here. For more information. www.keystone.org/Monarch Resources

The Monarch Collaborative is a multi-sector initiative to promote partnerships in the farming and ranching community to support and enhance habitat for a sustainable monarch population. For more information, please visit: www.keystone.org/monarch