Design Project

- Select a farm site to create a multifunctional riparian buffer for, ideally:
 - An existing client with intentions to implement a riparian buffer
 - A 3+ acre site with a minimum of 100 linear ft of riparian area
 - An existing client you work with that would be likely to implement the project and use your design
- Information collection:
 - Identify key landscape features:
 - Soil type
 - Slopes, ditches, hills, rills, etc.
 - Existing plant and animal life (critical natives, weedy or invasive species, micro and macro fauna, etc.)
 - Identify farmer goals and current farming methods:
 - What is currently on the land where the buffer would be installed?
 - What concerns does the farmer have regarding installation of the buffer?
 - What does the farmer hope to achieve by installing the buffer?
 - How much labor or mechanization is needed to maintain the buffer?
 - Other factors to consider for the design process:
 - Environmental reports and goals from local gov't or orgs? (water quality, at-risk pollinators, global warming mitigation, etc.)
 - Effects on neighbors? Downstream communities?
 - Community engagement?
 - Available funding? Professional partnerships?
- Design process:
 - Map site measure area of buffer, along with distances and dimensions for things like tractor access, planting contours, access to utilities, etc.
 - Identify appropriate plant species that suit the site and goals of the design. Create a plant list to guide your design, including design features like height & spread, type (tree/shrub/perennial), functionality (pollinator/food/fodder/etc.), sunlight needs, preferred soil type, etc.
 - Sketch your design idea using any medium, paying attention to proper spacing of plants, number of plants needed, cardinal directions, features to work around, distances between water and other natural resources, access points, and any other details necessary for implementation.
 - Create a budget including total of planting materials, associated installation needs (equipment, tree tubes, irrigation, etc.), and estimated labor needs. List possible sources for necessary labor and inputs.

This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, through the Northeast Sustainable Agriculture Research and Education program under subaward number <u>ENE22-177</u> and managed by a partnership between <u>Berkshire Agricultural Ventures</u>, <u>Propagate</u>, and <u>Landscape Interactions</u>. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.