

# Create and Maintain Habitat



## What is Island Marble Habitat?

Island marble butterflies live in open grass and forb dominated habitats. In upland prairies, disturbed fields/soil, and agricultural settings they use field mustard (*Brassica rapa*) as their host plant.

Generally, island marble butterflies are attracted to field mustard growing in low densities (0.03 plants per square foot), but they will lay eggs on single plants or dense patches too.

To be able to survive through their life cycle, their habitat must remain undisturbed until the next generation can emerge from their chrysalis. Those chrysalises remain vulnerable in the grass for up to 334 days!

## Example Habitat



Island Marble Habitat Expansion Project

## How Much Habitat Should I Create?

We are currently suggesting **50 square feet of linear habitat per acre OR 50 square feet of block habitat per acre** of enrolled property. Less is required for properties under an acre.

## What Are The Steps?

We are still working on the “recipe” and would appreciate your help! As a starting place, here is a brief summary of the general methods we suggest based on pilot projects:

### STEP 1

Choose a location for your habitat patch. Isolate that area from cattle if applicable. Optionally, you may also fence the patch to exclude deer.

### STEP 2

Disturb the soil. This could a combination of raking, tilling, mowing, solarization, herbicide, or other methods. Best done in the fall or winter.

### STEP 3

Seed in field mustard. We suggest a low seeding rate of approximately 5 grams per hundred square feet. However, if field mustard is present in the seed bank, seeding may not be necessary.

### STEP 4

Consider also seeding an optional cover crop. We expect that other plants, such as a grass, can deter the establishment of noxious weeds.

### STEP 5

OPTIONAL: Add a vegetative buffer around your patch to provide protection for caterpillars and chrysalises that may be within 5 feet of the patch.



## Moving or Refreshing Your Habitat

### STEP 6

Remove any field mustard in the patch by hand April 1 - July 1 to prevent egg laying.

### STEP 7

After July 1, when the butterflies have flown, you can repeat Step 1 on the same footprint or in a new location.

## Does Shape Matter?

MAYBE! Island Marble Butterflies prefer to lay eggs on the edges of patches of mustards. Therefore, patches of mustards with more edge are likely to receive more eggs. Since host plant density appears more important than shape, we are flexible regarding patch shape and configuration.

Linear

Block

Linear

Linear

## What if I don't grow 0.03 mustards per square foot?

Compliance with this CCAA is more about good-faith effort in creating habitat. We recognize that each patch will look different and that results will not be consistent year to year. That's why it is important for lots of land owners to participate!