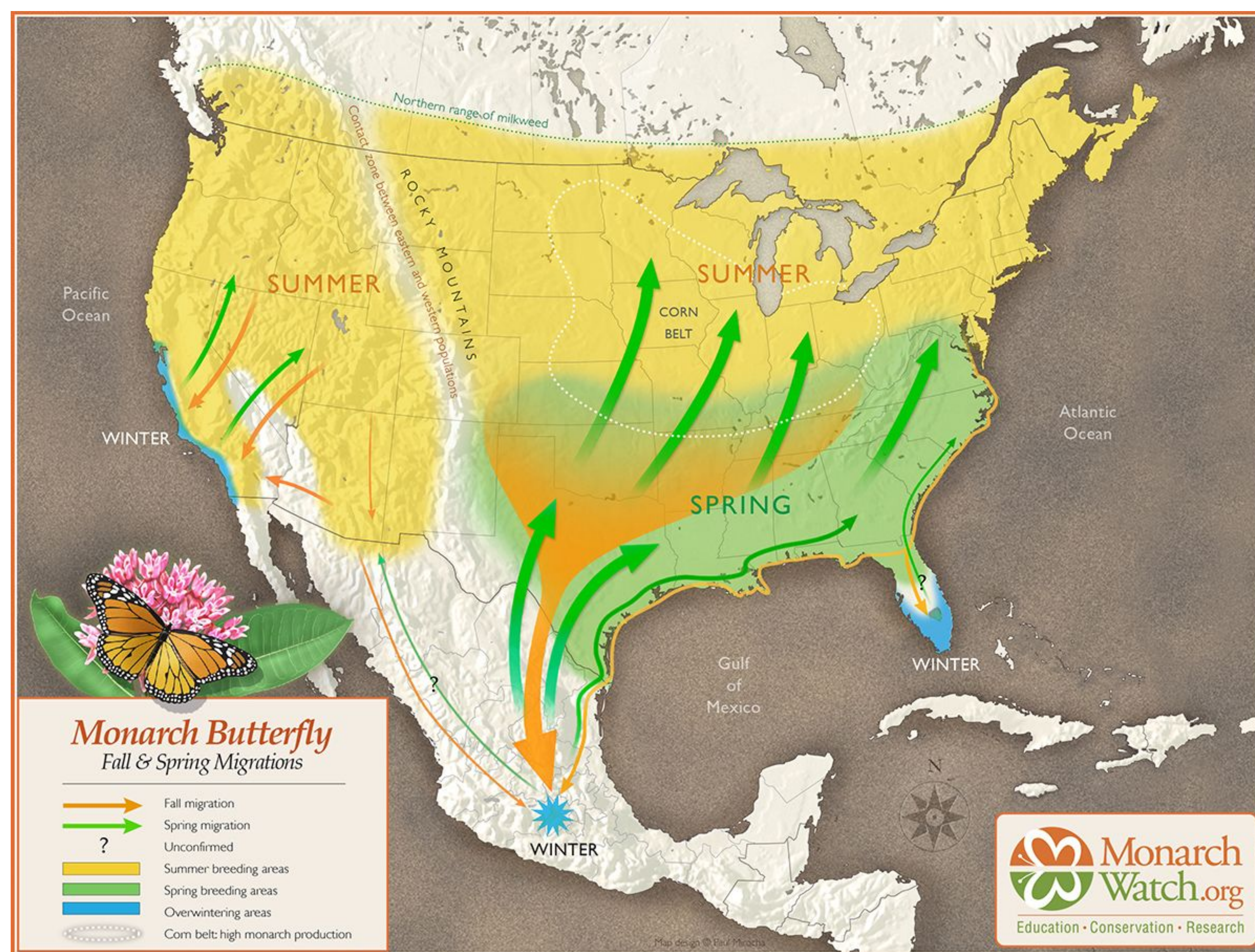


# Monarch Butterfly Release

Jon Elmquist and Makaylee Crone

## Monarch Migration

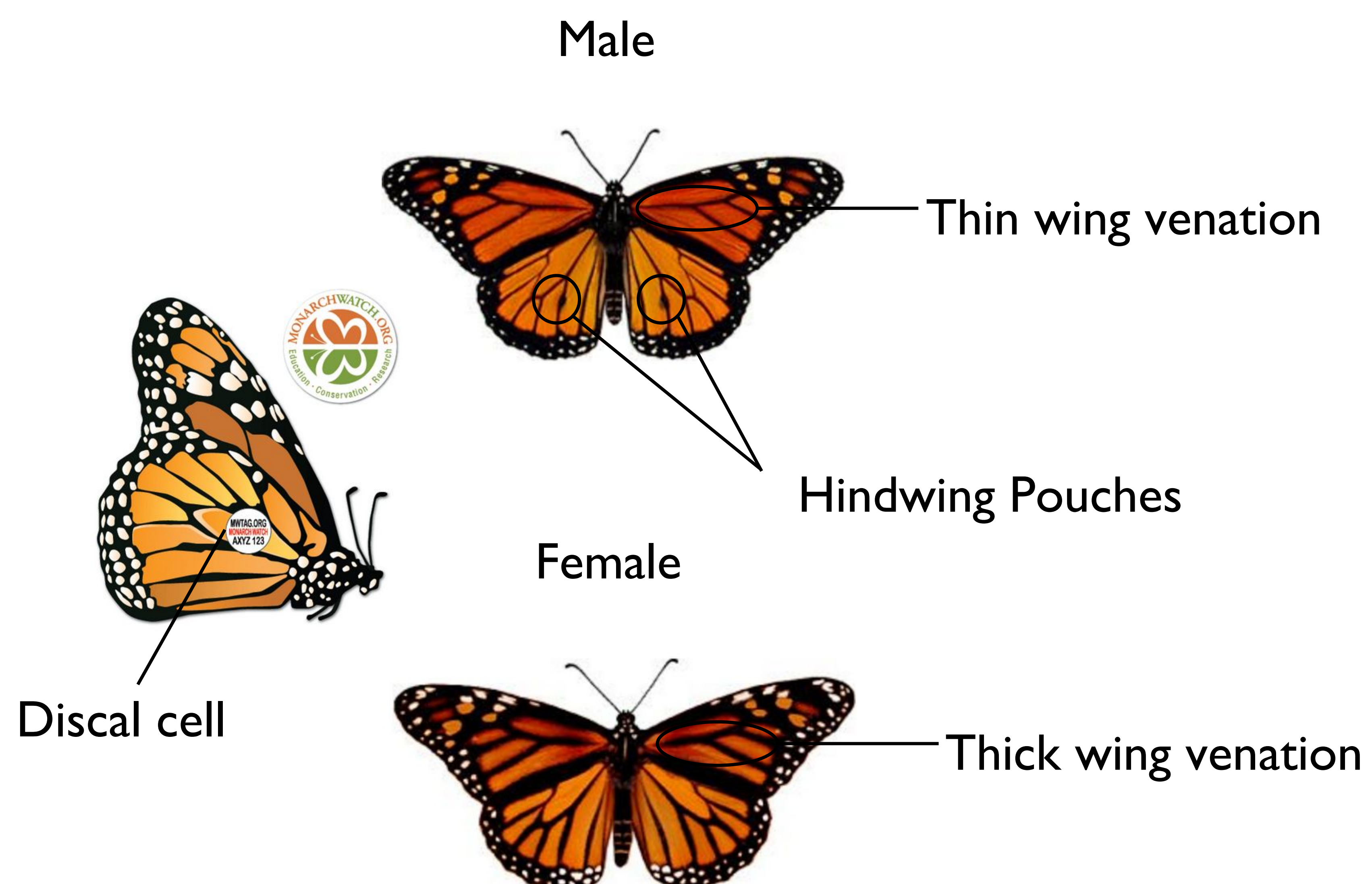
Monarchs (*Danaus plexippus*) are a species of butterfly known across North America for their charismatic orange and black wings and amazing multi-generational migration. Each fall, decreasing day length, temperatures, and quality of host and nectar plants cue millions of monarchs to migrate to their forest overwintering sites in Mexico and along the California coast, with many traveling distances up to 3,000 miles! Monarch butterflies typically live between 2-6 weeks; however, monarchs traveling to Mexico can live up to 9 months due to a delay in development caused by fall environmental cues. Once winter passes and spring arrives, these long-lived monarchs will mate, and future generations, usually 3-4, will make the multi-generational journey back to their spring and summer breeding grounds. These conditions are difficult to induce artificially, which is why not all monarchs that are reared in artificial environments will reach an overwintering destination. Today you will have the opportunity to tag and release butterflies that were reared for migration research!



## Instructions

1. Determine if your butterfly is male or female (see right). Inform the volunteer assisting you and they will give you a numbered tag.
2. Carefully hold the butterfly between your thumb and pointer finger along the body near the inner edge of the wings.
3. Find the discal cell on either wing and place the tag before applying pressure to the tag on each side with two fingers for at least 5 seconds.
4. Place your butterfly in the release tent. Butterflies will be released outside in waves by volunteers.

## Is your monarch male or female?



## What happens next?

Volunteers will submit information online about each butterfly tagged today. This will include the number on the tag, the location released, and if the butterfly was male or female. We will also indicate that all monarchs were reared artificially and were sourced from the Monarch Watch population. Researchers and citizen scientists that find tagged butterflies will enter their location on monarchwatch.org. This information will help better inform researchers of the state of monarch populations and migration movements of reared populations.