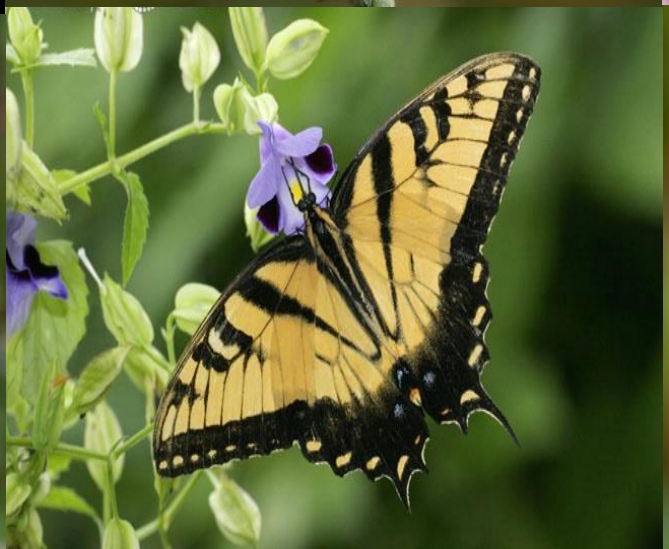







- **Welcome the participants to your event and introduce yourself and any other important people who helped make this project possible**

- **Without showing them the first picture, ask the participants to provide some examples of pollinators**

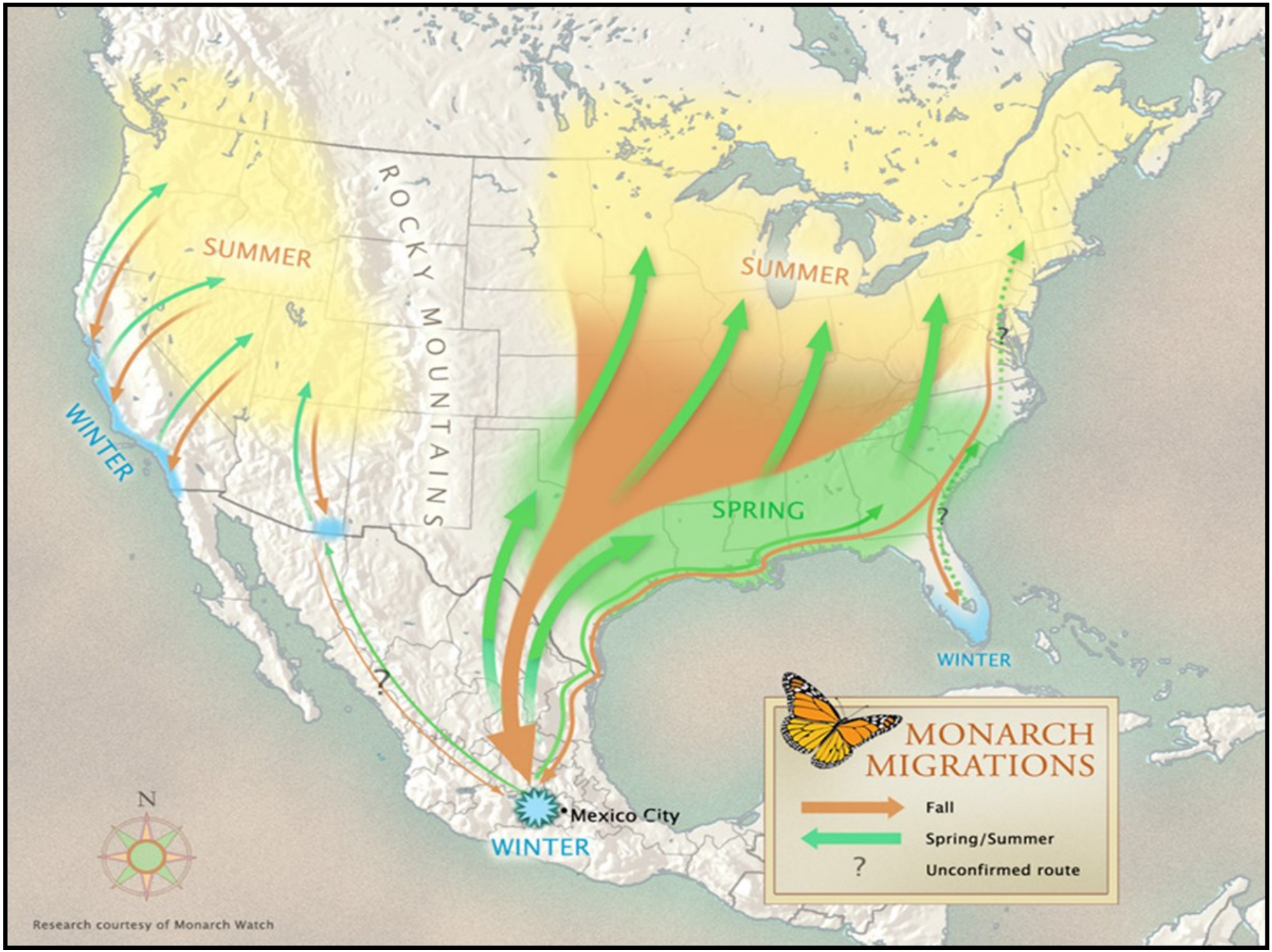
- **You can then go through the picture and mention the ones they may have missed**

Pictures left to right = Hummingbirds, beetles, flys, bats, spiders, wasps, moths, butterflies, bees

- **Show the participants the picture #2 and ask them if they can identify the species of butterfly displayed**

- **After they identify the butterfly as a Monarch, ask the participants what makes this butterfly so popular and well know**

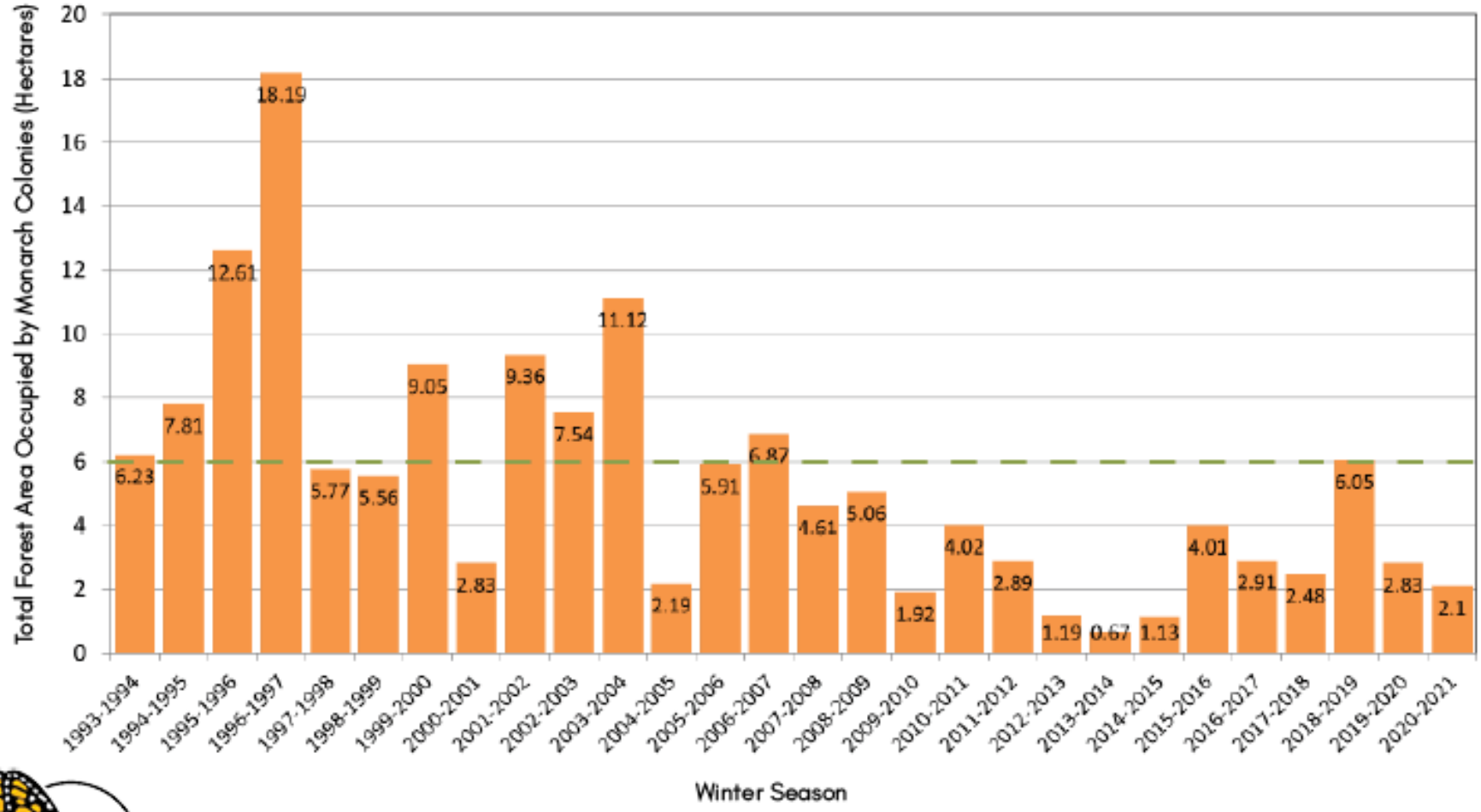
- **After a number of guesses, explain to them that the one thing that makes this butterfly so unique and popular is its migratory story**
- **Can ask if they know if this is a male or female (males have black dots)**


SUMMER
ROCKY MOUNTAINS
SUMMER
WINTER
SPRING
?
?
?
WINTER
Mexico City
WINTER
N
MONARCH MIGRATIONS
Fall
Spring/Summer
?
Unconfirmed route
Research courtesy of Monarch Watch

- **Show the participants the picture #3 and explain the migratory story of the monarch butterfly**
- **The monarch butterfly migrates from Central Mexico to as far North as Canada in one year**
- **It takes 4-5 generations for the butterfly to make its annual migration**
- **The 1st-3rd generation butterflies live about 1 month**
- **The 4th generation butterfly lives 6-8 months and overwinters in Central Mexico**

Total Area Occupied by Monarch Colonies at Overwintering Sites in Mexico

1993/1994 - 2020/2021



MONARCH JOINT VENTURE

Scientists estimate that a minimum of 6 hectars of overwintering monarchs is needed to sustain the eastern population (Semmens et al., 2016).

Data from 1994-2003 were collected by personnel of the Monarch Butterfly Biosphere Reserve (MBBR) of the National Commission of Protected Natural Areas (CONANP) in Mexico. Data from 2004-2021 were collected by the WWF-Telcel Alliance, in coordination with the Directorate of the MBBR. 2000-01 population number as reported by Garcia-Serrano et al. in 2004.

- **The monarch butterfly population has been on a steady decrease for the late two decades**

- **The monarch butterfly population has decreased 90% over the last two decades and 26% in the last year**

- **Before showing the next photo, ask the participants if they know why the monarch butterfly population has been decreasing**

- **The main cause of monarch decline can be tied to the lack of milkweed and other nectar plants throughout the Mid-west**

- **Monarch butterflies only lay their eggs on milkweed plants**

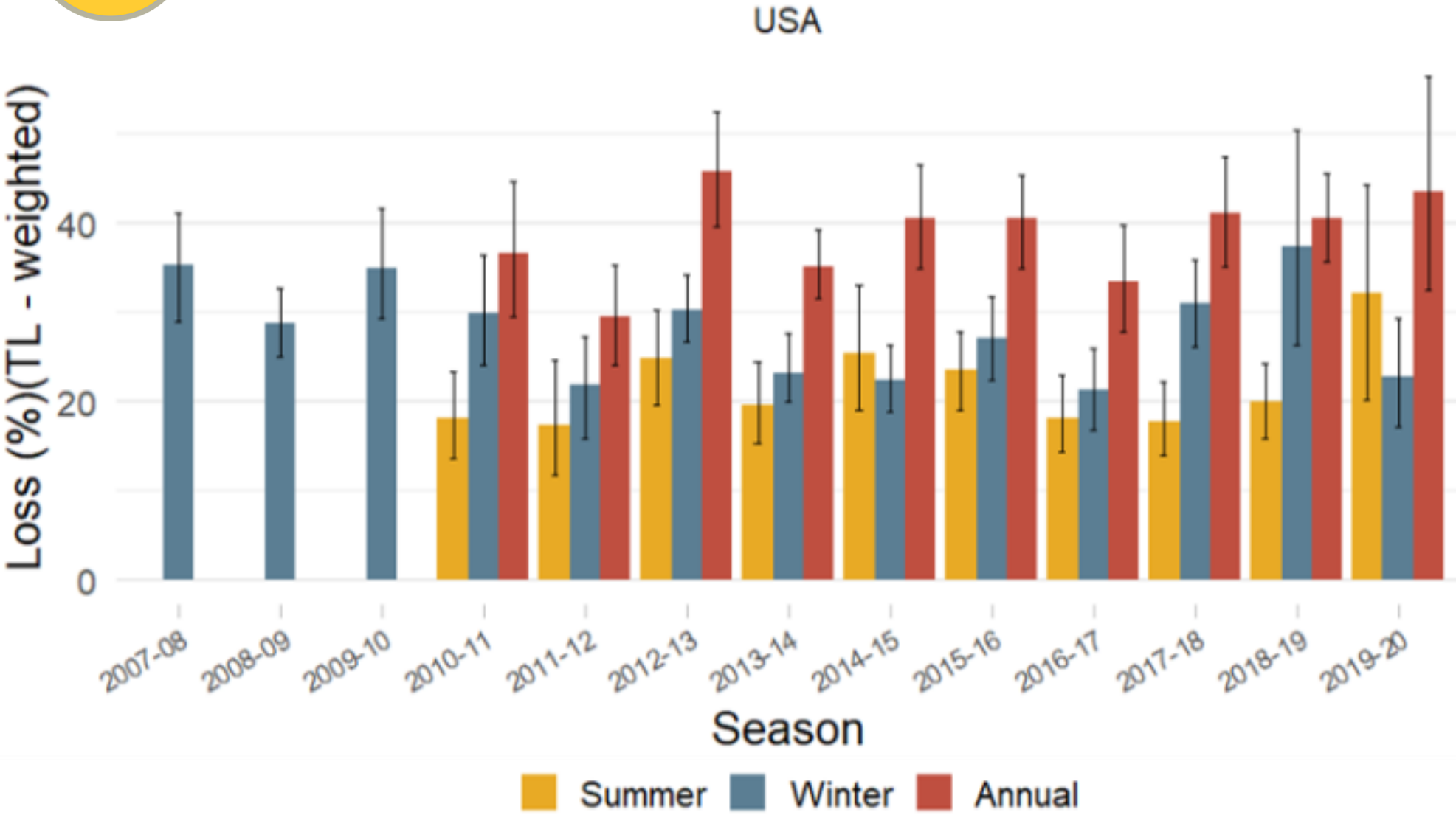
- **There are over 120 species of milkweed in the U.S.**

- **The most important milkweed species to monarchs is common milkweed (pictured)**

- **Show the participants the picture of the bee and ask them if they can name the species (honey bee)**

- **After they name the species, explain to them that the honey bee is also experiencing a decline in its population and show them the next slide (graph)**

Honeybee Loss & Management Survey



- **Honey bee keepers are reporting annual losses over 40% which is not sustainable over a long period of time**

- **This is extremely alarming as the honey bee and other pollinators are responsible for creating 1 out of every 3 bites of food we eat each day**

- **Before showing them the next graph, ask the participants if they know why the honey bee is declining in population**

- **Like monarch butterflies, honey bees visit wildflowers to feed on pollen and nectar.**

- **Like humans, honey bees need a diverse diet to keep their immune systems healthy. Unhealthy diets make them susceptible to disease.**

- **Since there is a lack of diversity of flowering plants on the landscape, scientist believe that poor nutrition is to blame for honey bee population decreases.**

- **Areas that provide a diversity of blooming plants, like the photo. provide pollinators a variety of nutrients to keep them healthy.**

- **Pheasants Forever and Quail Forever are very interested in establishing quality pollinator habitat across the country.**

- **Pollinator habitat is very important to pheasant and quail chicks.**

- **Would anyone like to guess what pheasant (pictured) and quail chicks feed on for the first six to eight weeks of life?**

- **Pheasant and quail chicks feed exclusively on soft-bodied insects (pollinators) for the first six to eight weeks of life.**

- **Pictured here is the crop (stomach) contents of a young quail check. As you can see, the majority of what they eat are soft bodied insects.**

- **Insects provide a very good source of protein for chicks and help them grow quickly to avoid predators.**


Pollinator Habitat Project
Native wildflowers provide valuable habitat for pollinating insects, grassland songbirds, pheasants and quail.
Pollinators impact 75% of the global food supply, are keystone indicators of environmental health and their populations are in decline.
CORTEVA
Lee Cave
To learn more about pollinators, contact Pheasants Forever at:
www.pheasantsforever.org

- **What you are doing here today is helping provide valuable habitat for birds, bees and butterflies.**

- **Our goal is to establish a pollinator plot that looks similar to the photo in a few years.**