

### Community Agriculture Serving Community Needs

#### Introduction:

**Bird Creek Farms** is owned by the **Osage Nation** and is adjacent (next to) to the city of **Pawhuska**, Oklahoma, which is the capital of the Osage Nation.



Bird Creek Farms covers **70 acres**. How big is an **acre**? One acre is 43,560 square feet. Think of a football field - it is about 1.32 acres. 53 football fields would fit in Bird Creek Farms.

It was named after **Bird Creek**, one of the main watersheds of the Osage Reservation in Oklahoma. A **watershed** is an area of land in which all of the water that falls in it drains off into a common outlet, i.e. creek or river. Bird Creek watershed begins in the **high tallgrass prairie pastures of north central Osage County**, flows southeast past Pawhuska, Barnsdall, Skiatook, and finally to Tulsa where Bird Creek joins the **Verdigris River**. Near Muscogee at an area historically known as **Three Forks**, the **Verdigris and Neosho** flow into the the large **Arkansas River** (which forms the southeastern border of Osage County). (A river **fork** is a place where a river divides into two parts.) The Three Forks area is important to Osage history because it is the site of the earliest-known Osage village in Oklahoma (Burns 64).

Founded in 2014, Bird Creek Farms' **goals** are to strengthen Osage culture, increase access to healthy foods by providing farm-fresh alternatives, conduct agricultural experiments, and host educational classes on traditional Osage food-ways and agriculture.

The initial focus was on establishing a garden in which to grow healthier food. Since that time, Bird Creek Farms has grown and is already able to meet a number of broader goals.

Here are some of their **ACTIVITIES**:

#### 1. Gardening & food production

- Growing produce in large **high tunnel hoop houses**. These are like a large plastic-covered greenhouse. They are naturally heated by the sun. They create a longer growing season and protect crops from frost and wind.
- Growing **vegetables** which include: potatoes, cabbage, onions, beans, pumpkins, tomatoes, peppers, corn, squash, broccoli, cucumber, blackberries, strawberries, beets, radishes, zucchini, and gourds
- Utilizing an **aquaponics** program [**aqua** means water] - a combination of **aquaculture** (raising fish) and **hydroponics** (the soil-less growing of plants) that grows fish and plants together in one integrated system. ... Earthworms turn the solid fish waste into **vermicompost** - fertilizer that is used as food for the plants.
- Conducting **bee-keeping** with several bee-hives: this produces honey and also provides bees to pollinate plants in the nearby gardens and boost production

- Experimenting with Osage traditional methods of **Three Sisters gardening**: the growing corn, beans, and squash together. In very early days, women planted these three crops in April, the tribe moved west to hunt buffalo in summer; then returned to harvest the three crops in late August.
- Utilizing **soil testing** - to insure highest fertility
- Providing **community garden** space - where Osage people can use the garden space and watering facilities to grow their own gardens on Bird Creek Farms

## 2. Conservation

- Participating in Monarch Watch Project, TEAM-Tribal Environmental Action for Monarchs, Tribal Alliance for Pollinators
- To help Monarchs and other pollinators, growing native plants to begin and stock a **seed bank**, and creating **pollinator habitats** by planting and growing **pollinator food islands** - areas of plants such as milkweed that help monarchs on their annual migration from Mexico to Canada
- Through these programs, conserving and restoring grassland ecosystems to help threatened pollinators. This also helps **preserve the native plants** that serve as the foundation for Indigenous cultural, medicinal and culinary traditions

## 3. Community Services

- **Donating produce** (food grown on the farm) free-of-charge to key nutritional programs for elders and children, like Title VI and Head Start.
- **Providing firewood**: this is done because wood fires are a traditional part of many Osage community events. Bird Creek Farms will cut, split, and stack wood into ricks for groups or events such as the following:
  - Bereaved Osage families (after death of a family member) - memorial dinners (Head Cook may apply for one rick)
  - In-Lon-Schka Dance Committees (Drum Keeper or Head Cook may apply for five ricks)
  - Family camps during In-Lon-schka family member may apply for one per camp)
  - Native American Church meetings (Head Cook may apply for one-half rick)
  - Naming Ceremonies (parents of child being named, person being named, or Head Cook may apply for one rick)
  - Osage Nation-sponsored events (Department Director or his/her designee may apply for one rick)

## 4. Outdoor Education and Recreation:

- Developing the **Wah-Zha-Zhi Eco Park** - an area of walking trails and fishing docks - to encourage outdoor exercise in natural places and catching fish as healthy part of diet
- Assisting students with **gardening in raised beds at schools** such as WELA (Wah-Zha-Zhi Early Learning Academy) and Language Immersion School
- Providing **outdoor classroom areas for educational camps** such as Science-Technology-Engineering-Art-Mathematics - **STEAM Camp** and traditional methods **Fishing Camp**