

Beekeeping in Delaware

Delaware may be the second smallest state (nickname is **SMALL WONDER**) but it is still big in agriculture. Firmly wedged in the industrial Mid- Atlantic States between New Jersey, Pennsylvania and Maryland, Delaware still counts some 2500 farms accounting for 39% of total land use in the state.



Delaware has but three counties (the original 3 counties of the Lower Delaware River of William Penn's Pennsylvania). The Northern New Castle, Co., where the University of Delaware is located, is bisected by I 95 and the Delaware and Chesapeake Canal (uniting Chesapeake and Delaware Bays). The two lower counties Kent and Sussex are still rural. Both these 2 counties rank in the top 2% in production of vegetables (of over 3000 total US counties).

Sussex, the largest of three counties, is the birthplace of the American broiler industry and is either the first or second ranked county in broiler production in the U.S. Delaware ranks 1st in the value of agricultural products sold per farm (over \$425,000) and value of agricultural production produced per acre of land in farms.

In support of the broiler industry, there is extensive corn and soybean acreage, among the vegetable farms, across the three counties of Delaware. The three DE counties, along with neighboring counties of Eastern shore Maryland and Virginia is one large fertile, largely flat, growing area, blessed with abundant water resources, called the **Delmarva Peninsula**.

Delaware is also called **The First State**. They were, in fact, the first of the 13 original colonies to sign the new Federal Constitution developed by the

Continental Congress in Philadelphia (Dec. 7, 1787). Over ½ the just under 900,000 citizens of Delaware live in communities originally settled by Swedish and Dutch immigrants. The portion of Delaware below the Chesapeake and Delaware Canal and the vast majority of the two lower counties (Kent and Sussex) are still rural and primarily agriculturally oriented.

Delaware has two additional nicknames. It was called the **Diamond State**.

According to legend, Thomas Jefferson gave this nickname to Delaware because he described Delaware as a "jewel" among states due to its strategic location on the Eastern Seaboard. Delaware is also called the **Blue Hen**

State. (Note the University mascot is a Fightin' Blue Hen). Blue nickname was given to Delaware for the fighting Blue Hen Cocks, carried with the Delaware Revolutionary War Soldiers for entertainment during Cockfights. Delaware, which is neither north or south of the Mason Dixon line (it is east), never succeeded from the Union and her soldiers fought on both sides.



Beekeepers benefit from soybeans grown for chickens but it is the extensive fruit and vegetable truck farms of the Peninsula that bring in honey; yields are not large with more than a super uncommon. It is possible however, with only a short colony move, to secure two pollination rentals and two honey crops in Delaware. Many beekeepers keep their bee colonies on trailers or modified farm wagons to take advantage of the growing practices of their farming neighbors.

Delaware's estimated 300 beekeepers are hobbyists and sideliners. They are doctors, carpenters, government workers, students, farmers and a hundred other occupations, all with the common interest in keeping one to 100 or so bee colonies. Not all sell their honey harvest, but of those that do, the vast majority sell their products locally, particularly at roadside stands. Some



beekeepers operate their own roadside markets selling not only honey from their bees but other produce they grow. Most provide honey to stands maintained by others.

There is a non-agriculturally based nectar flow in Delaware but it is an early one. Being low (the highest point in the state, Mt. Cuba is only 800 ft.), early pollen sources are not usually a problem across the state (at one time northern beekeepers from NY and New England states moved to coastal DE to obtain the early pollen boost.) Winters are mild and colonies winter easily. Spring build up must be rapid since tulip poplar and locust bloom in early May. Roadside weeds and lawn clovers extended the nectar flow to June but after that little nectar is available for backyard colonies until fall flowers bloom in late August-September. With the early nectar flow, many colonies build up on the nectar flow rather than store it as surplus.

Fruit orchards offer some early pollination rentals for Delaware beekeepers. Delaware was once a major peach state (state flower is a peach flower) but an insect-transmitted blight nearly wiped out every peach tree in the 1930's. Today only blight resistant varieties are grown in a few apple orchards scattered across the three counties.



Brambles and blueberries, including pick-your-own operators, are increasingly popular. Acreage is still low so many growers do not need to rent colonies.

By late June and July, pollination rentals are available in cucurbits – especially cucumber, cantaloupe and watermelons. A few beekeepers get double rentals with varied planting dates and some destruct-harvest cucumber acreage that need higher populations of rental bees for a shorter time. If growers would provide adequate bees for pollination as per recommendations, there would be too few colonies available for the growers.

Summer honey sources in Delaware are related to agricultural crops. Soybeans provide some surplus honey at some locations. There is a great deal of variation in attraction to honey bees by soybean variety as shown in studies in the midwest and our own studies conducted by the University. Due to this and other factors,

beekeepers generally do not move their own colonies to soybean fields. Beekeepers near such fields are the ones who benefit and obtain surplus honey.



Beekeepers in Delaware and surrounding neighboring states move bee colonies to lima bean fields. Lima bean yields a light honey that remains high in moisture content. It is usually reliable, yielding a super or more of honey for the beekeeper. With better IPM-based insect control on lima beans, the risk of pesticide losses to bee colonies have been decreased. Delaware's fall wild flowers are generally adequate to provide enough stores for overwintering of bee colonies. Some beekeepers supplement winter stores by feeding sugar syrup. In addition to goldenrod and asters, several fall blooming flowers in the wetter, marshy areas of the state such as *Bidens* and sweet pepper bush provides the bulk of the fall nectar sources.

Author: Dewey M. Caron Original: *Gleanings in Bee Culture*. Dec. 1985. Revision 2007 *Delaware Cooperative Extension Leaflet AP-2*. Revised 2017.