



STATE OF GEORGIA
DEPARTMENT OF AGRICULTURE

Gary W. Black
COMMISSIONER

September 26, 2016

Mr. Lamar Norton
Executive Director
Georgia Municipal Association
Post Office Box 105377
Atlanta, Georgia 30348

Dear Mr. Norton:

The Southeastern United States is prime for a rise in mosquito activity. Recent rainfall has increased mosquito breeding grounds, and conditions are favorable for the spread of mosquito-borne viruses such as Zika and West Nile virus.

As government officials, the public entrusts us to rely on sound scientific facts when making decisions regarding public health issues. Mosquito control is a scientifically valid measure to help prevent the spread of Zika and other mosquito-vectoring diseases. In that effort, pesticides continue to be a valuable tool. As with any pesticide application, best management practices must be used to prevent drift to non-target areas and to minimize exposure to humans, pets and other non-target organisms.

Honeybees and other pollinators are susceptible to some of the mosquito adulticides used in managing mosquito populations. The key to management is finding a balance when making decisions on when, where and what to use in mosquito control. If pesticides are used, voluntarily contacting beekeepers can be an effective step in helping to ensure susceptible pollinators are not harmed. Locating managed honeybee hives can be as simple as contacting the local Cooperative Extension Service office for assistance. A list of the county offices can be found on the Extension Service website at <http://extension.uga.edu/about/county/>.

There are also measures beekeepers can take to protect pollinators, including notifying mosquito control programs of hive locations and following the *UGA Protecting Georgia's Pollinators* publication for suggestions on how to mitigate exposure to pesticides that might harm pollinators. This publication can be downloaded from the University of Georgia College of Agricultural and Environmental Sciences website at <http://ent.uga.edu/bees/documents/PollinatorBookletforWeb2-2016.pdf>.

A short Mosquito Control and Beekeepers Fact Sheet is enclosed with this letter. I would deeply appreciate your cooperation in communicating this information to your membership across the state. Thank you in advance for your assistance, and please let me know if I can ever be of assistance.

Sincerely,



Gary W. Black
Commissioner

Enclosure

Mosquito Control and Beekeepers Fact Sheet

Introduction

This document addresses the concern among beekeepers in Georgia over mosquito control programs and how they may impact honey bee colonies. Georgia has many lakes, rivers, streams, and ponds, and moderate annual rainfall. The abundance of water in Georgia makes it the perfect breeding ground for mosquitoes and the diseases they may carry and transmit.

Mosquito control and the beekeeper

City and county governments that operate mosquito control programs can develop communication opportunities with beekeepers. To determine if there is a local beekeeping club:

- contact the local County Agriculture Extension Agent, or
- visit the Georgia Beekeepers Association website (www.gabeekeeping.com/Clubs/local_clubs.html)

If a club is not local, the County Agriculture Extension Agents may be able to provide names of area beekeepers.

Providing information or alerts to beekeepers:

- Create a beekeeper registration
 - Beekeepers can provide their contact information and be contacted prior to pesticide applications in their area
- Publish application times and areas (local newspaper, county or city website, etc.)
 - beekeepers can determine application times in their area and take appropriate steps to protect their hives
- Use local radio and TV for Public Service Announcements to provide information

What can a beekeeper do?

The best thing a beekeeper can do to minimize the damage resulting from any mosquito control program is be educated. Beekeepers should work with their local Mosquito Control Program and determine (1) when they spray, (2) where they spray, and (3) what pesticide(s) they use. This information can help one locate apiaries appropriately, thereby protecting bees. Furthermore, it may be possible to work with the local Mosquito Control Program to help them create a "bee friendly" spray program. Keep in mind that Mosquito Control Programs are constrained somewhat by regulations. It is important to communicate with the local Mosquito Control Program.

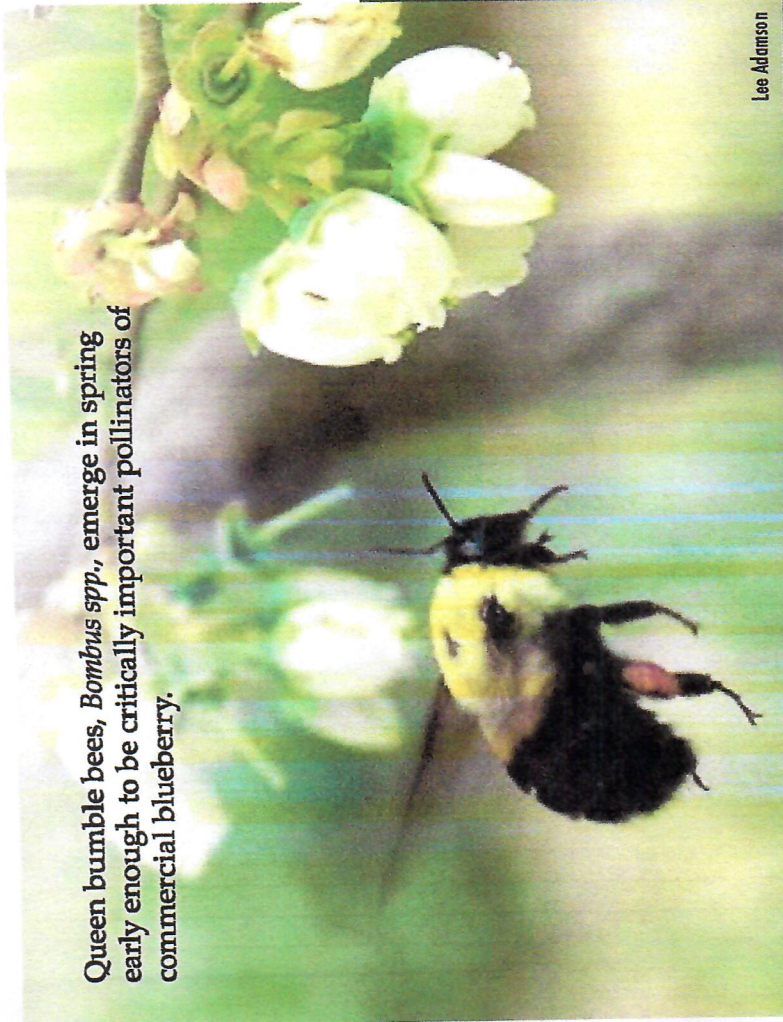
Beekeepers can:

- Move or cover hives when applications are scheduled
- Use a sprinkler near the hive to encourage the bees to stay in the hive rather than "beard" on the outside of the hive body

Additionally, the beekeeper can follow suggestions found in the publication; *UGA's Protecting Georgia's Pollinators* to mitigate exposure. This document can be downloaded at:

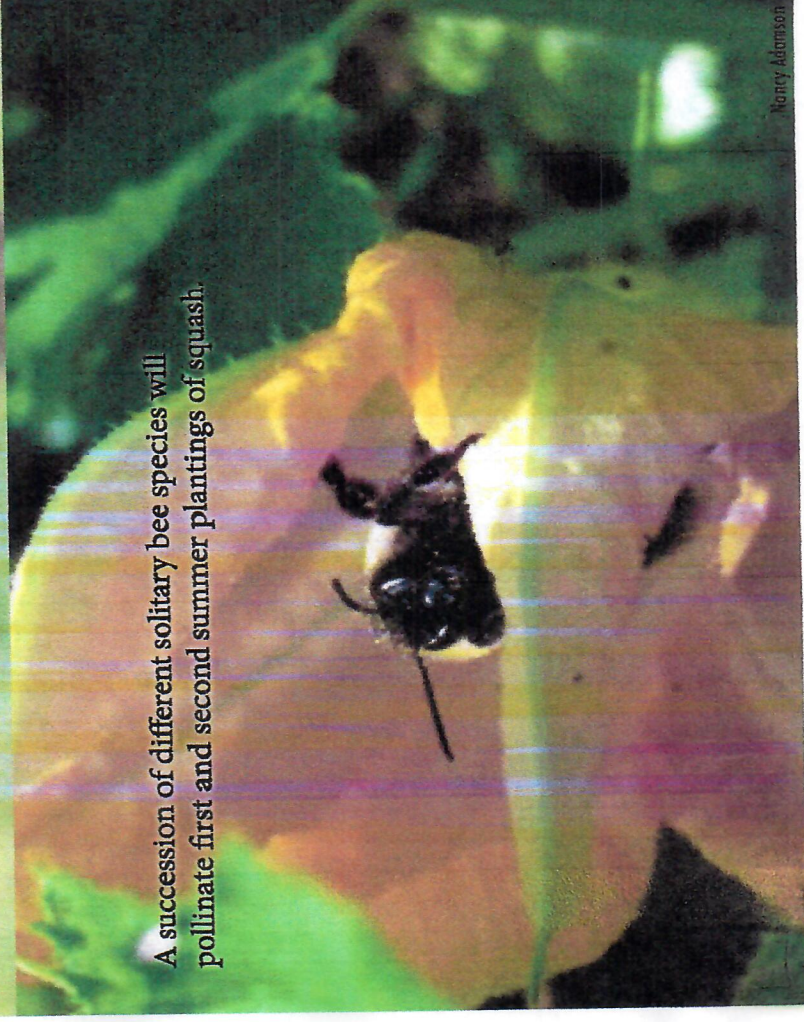
<http://ent.uga.edu/bees/documents/PollinatorBookletforWeb2-2016.pdf>

Queen bumble bees, *Bombus spp.*, emerge in spring early enough to be critically important pollinators of commercial blueberry.



Lee Adamson

A succession of different solitary bee species will pollinate first and second summer plantings of squash.



Honey Adamson

PROTECTING GEORGIA'S POLLINATORS

A state plan for promoting a large, healthy and diverse pollinator workforce

Pollination is the transfer of pollen from the male parts of a flower to the female parts of the same or a different flower. This is necessary for the production of seed and fruit in many crops. A 2014 economic impact study by the University of Georgia determined that the annual value of pollination to Georgia is over \$360 million. While many insects such as flies, beetles, moths, butterflies and wasps can be important pollinators, bees outperform them all because of their dietary need for pollen and nectar, their hairy bodies that carry pollen grains easily and their rapid flight from flower to flower. Species such as bumble bees and honey bees can be managed on a large scale suitable for the high-acreage pollination demands of modern agriculture. As important as managed bees are for pollination, the services provided for free by unmanaged, wild bees are at least equally valuable. Pollination is an ecosystem service, a gift from nature, with economic returns similar to rainfall or soil fertility; therefore, pollinators require proactive stewardship from all Georgia stakeholders, including beekeepers, farmers, foresters, land managers, homeowners, pest control operators and applicators.

Pollinator stewardship centers on maintaining healthy managed bee colonies, minimizing pesticide exposure and conserving and supplementing pollinator habitats. Many of the principles discussed here apply equally to urban or rural areas.