



Pesticide Report for 2018

North Carolina Department of Agriculture and Consumer Services
Steve Troxler, Commissioner



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FOREWORD

This will acknowledge and express our appreciation to the following people who made significant contributions to the contents and preparation of this Pesticide Report: Structural Pest Control & Pesticides Division / Pesticide Section – James W. Burnette, Jr., Director; Betty H. Griffin, Effie Carroll, Rhonda O’Neal, Jordan Hearn, Brandon Crowe, Processing Assistant III’s; Jennifer Johnson, Office Assistant IV; Lisa Huntsinger, Processing Assistant IV’s; Jamie Frye, Administrative Secretary II; Jan L. Culbreth, Information Processing Technician; Jacinth McAllister, Information Processing Manager; Jennifer Johnston, Administrative Officer I; Karen Hunt, Administrative Officer II; J. Patrick Jones, Deputy Pesticide Administrator; L. Lee Davis, Registration Manager; John Feagans, Licensing, Certification & Outreach Manager; John Allran, Risk Assessment and Environmental Fate Team Manager; Renee Woody, Environmental Programs Manager; Derrick Bell, Pesticide Disposal Assistance Program Manager; Sergio Morales-Monroy, Bilingual Pesticide Specialist; Paul Ward and Gwen T. Minton, Pesticide Environmental Investigative Specialists; Jason H. Williams, Pesticide Operations Specialist; Guido Hommelsheim, Pesticide Registration Specialist; Henry F. Weaver, Chelsea Ricks; Certification Specialist; N. Patrick Farquhar, and Dwight E. Seal, District Managers; Charles L. Clark, Steven F. Gatton, Travis Snodgrass, W. Barry Dunn, Arthur Watkins, Jamie Ward, Clay Hudson, and Doug Bullard, Pesticide Inspector II’s; Sydney Ross, Jimmy S. Merritt, Bruce Nicely, Charlie Jones, Eric Ball, John Colborne, Page Epele, Chris Smith, Chris Hassell, and William Brad Boyd, Pesticide Inspector I’s; Food and Drug Protection Division –Anita MacMullen, Director; Ron Willet, State Chemist; Dr. W. Mark Cosby, Chief Microbiologist; Dawn Davis and Vaishali M. Hingoo Microbiologists; Robert McIntyre, Organic Laboratory Supervisor; Patrick Andrews, Chemist II; Greg Hare, and Rusty Ross, Chemist I; David Mitchell, LAN Administrator.

How to Use This Report

The N.C. Pesticide Board is mandated by the General Statutes of North Carolina (§ 143-437) to make annual reports to the Governor on matters involving pesticides. The North Carolina Pesticide Report for 2018 fulfills this mandate. Considerable time and effort have gone into editing and organizing this 2018 edition which summarizes regulatory activities performed under the N.C. Pesticide Law of 1971. In this document you will find the following:

Introduction

The Introduction describes the development of laws and regulations governing the sale and use of pesticides in North Carolina. It also refers to certain divisions in the North Carolina Department of Agriculture & Consumer Services that perform key roles in regulating and controlling the sale and use of pesticides in this State.

North Carolina Pesticide Law of 1971 and Adopted Regulations

This section presents a brief abstract of the North Carolina Pesticide Law of 1971. It also indicates where to obtain a complete copy of the Law and the pursuant Regulations adopted by the North Carolina Pesticide Board.

Pesticide Board

This section presents a brief description of the duties and composition of the North Carolina Pesticide Board. In addition, a brief summary of each North Carolina Pesticide Board meeting held during 2018 is given.

Pesticide Environmental Trust Fund

In this section, a summary of the Pesticide Environmental Trust Fund's financial transactions for 2018 is presented. Balances, receipts, expenditures, refunds, cumulative (1993-2018) figures and project summaries are given.

Pesticide Container Recycling and Disposal Assistance Programs

This section summarizes the amount of plastic pesticide containers recycled during 2018 and the amount of pesticides waste collected at both the designated disposal collection sites and permanent household hazardous waste collection sites across North Carolina during the same year.

Definitions Adopted

This section explains definitions that were adopted for reporting the analytical results of pesticides sampled by pesticide inspectors and analyzed by the Department's laboratories.

Table I

Table I gives the analytical results of pesticides sampled and analyzed for their formulations. Company name and address are those listed on the product label when it was purchased in the marketplace.

Table II

Table II is an alphabetical listing of the names and addresses of manufacturers and/or distributors that were found to have unregistered or misbranded products in the marketplace during 2018.

Summary of Regulatory Activities Performed

This section presents a summary of the various regulatory activities performed by the Department under the North Carolina Pesticide Law of 1971. The following information is included: number of manufacturers who registered pesticides for sale; number of pesticide products registered; number of physical samples collected and examined; number of stop-sale, stop-use, or removal orders issued; the number of licenses and private applicator certificates issued; and the number of compliance inspections conducted.

Introduction

The term "Pesticide" covers a large number of materials and mixtures intended for destroying, controlling, or repelling pests such as insects, weeds, and other noxious plants, predatory animals and birds, soil-infesting pests such as nematodes, algae, snails, and bacteria. Other examples are disinfectants, antiseptics, and fungicides for use other than on living man or other animals, defoliants, various repellents, fly paper, and other adhesive products whose action goes beyond simple mechanics, moth proofers, wood preservatives other than common paints, mildew controls, and seed fumigants.

An adequate and readily available supply of many of these products is essential in the economical production of feed and fiber crops. The preservation of many products in storage and the control of domestic and industrial pests which affect both the health and welfare of human beings and animals are like-wise dependent on such materials.

While the development and distribution of various pesticides to serve the needs are important, provisions must be present to protect the public. During the years 1947 through 1971, it was the purpose of the economic poisons law (North Carolina Insecticide, Fungicide, and Rodenticide Act of 1947, G.S. 4A, Chapter 106) to protect the public from adulterated, misbranded, worthless, and dangerous products, and legitimate manufacturers from unscrupulous competition.

During the years 1953 through 1971, the aerial application of pesticides was regulated by the North Carolina Aerial Crop Dusting Law, G.S. 4B, Chapter 106. The Law and the regulations promulgated thereunder, in summary, required the registration and licensing of contractors and aviators who engaged in the custom application of pesticides by aircraft in North Carolina. The validity of a license was further restricted to the period of time that coverage by liability bond or insurance for damage by aircraft was in force.

During 1969, the North Carolina General Assembly through House Resolution 1392 directed the Legislative Research Commission to study the laws regulating pesticides in N.C. and report its findings and recommendations to the 1971 General Assembly. As a result of the findings and recommendations of the Commission, the North Carolina Pesticide Law of 1971 was adopted. The N.C. Pesticide Law of 1971 established the North Carolina Pesticide Board as the governing body for the programs of pesticide management and control set forth in the Law. Provisions for regulating the use, application (aerial and ground), sale, storage, disposal and registration of pesticides are set forth in the Law.

The Law provides for the adoption of a list of restricted use pesticides and requires the licensing of all pesticide dealers who sell restricted use pesticides directly to users. Pesticide applicators and consultants are also subject to licensing requirements. Private pesticide applicators are required to be certified or recertified in order to purchase, use, and supervise use of restricted use pesticides in agricultural commodity production.

The Commissioner of Agriculture is responsible for administering and enforcing the Law and all rules and regulations adopted by the Board.

Each brand or grade of pesticide must be registered with the North Carolina Department of Agriculture & Consumer Services before it can be legally offered for sale in the State. A \$150.00 registration fee for each brand or grade must accompany each application for registration. In addition to the registration fee, an annual environmental assessment must be paid for each brand or grade to be registered in North Carolina. The assessment shall be \$50.00 if the applicant's gross sales of the pesticide in this state for the preceding 12 months for the period ending September 30th were more than \$5,000.00 and \$25.00 if gross sales were less than \$5,000.00. This assessment must accompany the \$150.00 registration fee in order for the registration to be complete.

A statewide inspection service will be maintained to investigate incidents involving pesticide misuse and to implement programs to enhance compliance to the Law and regulations. In addition to product registration and applicator licensing programs, the Pesticide Section of the Structural Pest Control and Pesticides Division will implement programs as authorized by regulation pertaining to the quality of formulated pesticides, the storage, disposal, and use of pesticides. The Department will maintain analytical laboratories to conduct analysis of official samples obtained for regulatory purposes.

Brief of the North Carolina Pesticide Law of 1971

North Carolina Pesticide Board

Commissioner of Agriculture

North Carolina Pesticide Advisory Committee

Governing Body

Administrative and Enforcement

Assists the Board and Commissioner in an advisory capacity

Any pesticide may be designated as a “Restricted Use Pesticide” upon the grounds that in the judgment of the Board it is so hazardous or injurious to persons, pollinating insects, animals, crops, wildlife, lands, or the environment that additional restrictions on its sale, purpose, use, or possession are required. Restricted Use Pesticides also include any pesticide required by the Environmental Protection Agency to bear the designation on its labeling “Restricted Use Pesticide.” (Restricted Use Pesticides have been established by regulation.)

Restricted Use Pesticides

The Board may require certification and recertification of private pesticide applicators and charge a fee of up to \$10.00. The current fee is established by regulation at \$10 for a three-year certification.

Private Applicator Certification Requirement

All pesticide dealers who sell restricted use pesticides must be licensed. Application for a pesticide dealer’s license must be accompanied by a nonrefundable fee of \$75. All licenses shall expire on December 31 of the year for which they are issued. The license may be renewed annually upon application to the Department of Agriculture and Consumer Services, accompanied by a non-refundable fee of \$75 for each license. Each applicant must demonstrate upon written, or written and oral, examination his knowledge of pesticides, their usefulness and their hazards; his competence as a pesticide dealer; and his knowledge of the laws and regulations governing the use and sale of pesticides.

Pesticide Dealer Licensing Requirement

No person shall engage in the business of pesticide applicator within North Carolina unless he is licensed annually by the Board. Each license application shall be accompanied by a nonrefundable fee of \$75 for each applicator’s license and an additional \$25 for each aircraft to be licensed. A pesticide applicator is defined as any person who owns or operates a pesticide application business or who provides, for compensation, a service that includes the application of pesticides upon the lands or properties of another; any public operator; any golf course operator; any seed treater; any person engaged in demonstration or research pest control; and any other person who applies pesticides for compensation and is not exempt from this definition. It does not include:

Pesticide Applicator Licensing Requirement

a. Any person who uses or supervises the use of a pesticide (i) only for the purpose of producing an agricultural commodity on property owned or rented by him or his employer, or (ii) only (if applied without compensation other than trading of personal services between producers of agricultural commodities) on the property of another person, or (iii) only for the purposes set forth in (i) and (ii) above.

b. Any person who applies pesticides for structural pest control, as defined in the North Carolina Structural Pest Control Law (G.S. Chapter 106, Article 4C.)

Each applicant must demonstrate upon written, or written and oral, examination his competence as a pesticide applicator or public operator. In addition, to be licensed as a pilot, a person must have 125 hours and one year’s flying experience as a pilot in the field of aerial pesticide application.

No person shall perform services as a pest control consultant without first procuring from the Board a license. The application for a license shall be accompanied by an annual nonrefundable fee of \$75. A pest control consultant is defined as any person who, for a fee, offers or supplies technical advice, supervision, or aid, or recommends the use of specific pesticides for the purpose of controlling insects, plant diseases, weeds, and other pests, but does not include any person regulated by the North Carolina Structural Pest Control Act. Each applicant must demonstrate upon written, or written and oral, examination his competence as a pesticide consultant. An applicant for a pest control consultant license must possess a Ph.D., master’s, or bachelor’s degree in an agricultural or biological science from an accredited college or university with a minimum of 30 semester hours or 45 quarter hours of credit in subject areas pertinent to the category in which the applicant seeks to obtain a license. Emphasis of study must include insect, plant, bacterial, and fungal pests, as applicable to the category, and integrated pest management.

Pest Control Consultant Licensing Requirement

No person shall handle, transport, store, display, or distribute pesticides in such a

manner as to endanger man or his environment.

Every pesticide prior to being distributed, sold, or offered for sale within this State or delivered for transportation or transported in intrastate commerce or between points within this State through any point outside this State, shall be registered and such registration shall be renewed annually. Each manufacturer, distributor, or registrant of a pesticide shall supervise the activities of any employee or agent to prevent the making of deceptive or misleading statements about a pesticide. It shall be unlawful for any person to distribute, sell, or offer for sale any restricted use pesticide to any dealer who does not hold a valid N.C. Pesticide Dealer License.

Handling, Storage, and Disposal of Pesticides

Registration

A registration fee of \$150 for each brand or grade of pesticide is required. An additional \$200 delinquent registration penalty shall be assessed against the registrant for each brand or grade of pesticide marketed in North Carolina prior to registration.

Registration Fee and Delinquent Penalty

An annual Pesticide Environmental Trust Fund assessment fee is required for each brand or grade of pesticide registered. This fee is either \$25.00 or \$50.00, based on gross sales of the pesticide within the State for the previous year. The assessments provide funding for agromedicine efforts at East Carolina University, North Carolina State University, and North Carolina A&T University and for pesticide environmental programs administered by the N.C. Department of Agriculture & Consumer Services.

Pesticide Environmental Trust Fund Assessment

Registration is subject to refusal or cancellation for cause and upon hearing.

Refusal or Cancellation of Registration

Any brand or grade found to be deficient or excessive in active ingredients, misbranded, adulterated, or not registered is subject to "Stop Sale, Stop Use or Removal Orders."

"Stop Sale, Stop Use or Removal Orders"

The Pesticide Board may assess a civil penalty of not more than \$2,000 against any person who violates or directly causes a violation of any provision of this Article or any rule adopted pursuant to this Article. In determining the amount of any penalty, the Board may consider the degree and extent of harm caused by the violation and the cost of rectifying the damage caused by the violation.

Civil Penalties

Notwithstanding any other provision of this Law, the maximum penalty which may be assessed under this section against a "private pesticide applicator" is \$500 and such penalties may be assessed only for willful violations.

Other Penalties

Any person who shall be adjudged to have violated any provision of the Law, or any regulation of the Board adopted pursuant to this Law, shall be guilty of a Class 2 misdemeanor and for each violation shall be liable for a penalty of not less than \$100 or more than \$1,000 or shall be imprisoned for not more than 60 days, or both. In addition, if any person continues to violate or further violates any provision of this Article after written notice from the Board, the court may determine that each day during which the violation continued or is repeated constitutes a separate violation subject to the foregoing penalties.

NOTE: Copies of the North Carolina Pesticide Law of 1971, as amended through 2009, may be obtained upon request to the Pesticide Section, North Carolina Department of Agriculture & Consumer Services, 1090 Mail Service Center, Raleigh, NC 27699-1090. Copies of the Regulations adopted by the North Carolina Pesticide Board may be requested from the same source. Both documents are also available on the Internet at www.ncagr.com/str-pest/pesticides

North Carolina Pesticide Board

The North Carolina Pesticide Board is a seven-member, governor appointed Board charged with the duty of governing pesticide management and control as set forth in the North Carolina Pesticide Law of 1971 §143-436. The members represent different sectors of the regulated public.

The Board adopts rules and regulations and makes policies for the program outlined in the North Carolina Pesticide Law of 1971. Board members serve staggered four-year terms. Appointments to fill vacancies in the Board are of individuals having the same credentials as the predecessor.

MEMBERS OF THE NORTH CAROLINA PESTICIDE BOARD, 2018

One member each representing the North Carolina Department of Agriculture and Consumer Services; the North Carolina Department of Environment and Natural Resources; and the State Health Director or his designee. The persons so selected may be either members of a policy board or departmental officials or employees.

Dr. Colleen M. Hudak-Wise, Director, Agronomic Services Division,
N. C. Department of Agriculture and Consumer Services, 1040 Mail Service Center, Raleigh, NC 27699-1040
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Ms. Mary Penny Kelley, Secretary's Office,
N.C. Dept. of Environmental Quality, 1601 Mail Service Center, Raleigh, NC 27699-1601
(Tel. 919/707-8626) mary.kelley@ncdenr.gov

A representative of the agricultural chemical industry.

** **Dr. Thomas Allen Scarborough**, 7905 Farnham Ct., Raleigh, NC 27616
(Telephone: 919/676-4113 work) allen.scarborough@bayercropscience.com

A person directly engaged in agricultural production.

Mr. William "Shawn" Harding, 762 Harding Lane, Chocowinity, NC 27817
(Tel. 252/946-9349 home) info@southsidefarms.com

Two at-large members, from other fields of endeavor, one of whom shall be a nongovernmental conservationist.

Mr. Don F. Rogers, 2040 Dove Lane, Clayton, NC 27527
(Tel. 919/359-1004 home) neuseriverinspect@embarqmail.com

Dr. W. Benson Kirkman, 3712 Eakley Court, Raleigh, NC 27606
(Tel. 919/859-1187 home) bkirkman@mindspring.com

- * Chairman
- ** Vice Chairman

Secretary, James W. Burnette, Jr.
North Carolina Pesticide Board
1090 Mail Service Center, Raleigh, NC 27699-1090

North Carolina Pesticide Board Meetings

January 8, 2018

Patrick Jones, SPC&PD, updated the board on the revised federal Certification & Training Standards and Worker Protection Standards.

Mr. Jones also gave the board a brief update on Auxin technologies, the departments 2017 auxin training, and the proposed training for 2018. Mr. Jones then asked the board for \$15,000, for NCSU, from the PETF for the printing of Dicamba Record Keeping Manuals. The request was approved.

Renee Woody, SPC&PD, presented the final report for the Regional Survey of Mosquito Knowledge and Usage in North Carolina – Stephanie L. Richards, ECU. Ms. Woody made the presentation in Ms. Richard's absence.

Dr. Wayne Buhler, NCSU, presented the final report for production and distribution of Pesticide Record Keeping Manuals. After his report, Dr. Buhler asked the board to approve the private applicator training program for the next three years, 2018-2020. The program was approved by the board.

Dr. Mike Waldvogel, NCSU, requested funding to develop an enhanced, searchable version of the North Carolina Agricultural Chemical Manual in the amount of \$13,650. The request was approved by the board.

Assistant Attorney General Chris McLennan presented proposed settlement agreements for the Board's consideration and approval.

March 13, 2018

John Feagans, SPC&PD presented a Memorandum of Agreement between the N.C. Pesticide Board and the U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine (USDA-APHIS-PPQ). The Memorandum of Agreement was accepted by the Board.

Patrick Jones, SPC&PD, presented the final report for the Dicamba Record Keeping Manuals. The board thanked Mr. Jones for his part in printing and distributing the manuals.

Renee Woody, SPC&PD, presented a funding request for \$60,000 to fund the Plastic Pesticide Container Recycling Program for 2018. The board approved the request.

Assistant Attorney General Chris McLennan presented proposed settlement agreements for the Board's consideration and approval.

May 8, 2018

The board heard the final report of the periodic review of existing rules – 02 NCAC 9L, Pesticide Section. Jim Burnette told the board that no public comments were received for this period. After a brief discussion, the board voted to accept the report as presented.

Robin Tutor-Marcom, NC Agromedicine Institute, presented an update on the Worker Protection Standard Respiratory Protection Support project. After a brief discussion, the board thanked Mrs. Tutor-Marcom for the work that she and her staff are doing.

Assistant Attorney General Chris McLennan presented and area of concern to the board regarding Mamie Ellis. The board determined that, in order to protect the public's health and welfare, a Summary Suspension of Ms. Ellis' license was required and that a formal hearing be set as soon as possible. The approved suspending the license until the hearing.

Ken Giles, UC Davis, gave a presentation on remotely piloted aircraft and UAV pesticide applications. After a brief discussion, the board thanked Mr. Giles for his presentation.

Assistant Attorney General Chris McLennan presented proposed settlement agreements for the Board's consideration and approval.

June 12, 2018

Assistant Attorney General Chris McLennan presented proposed settlement agreements for the Board's consideration and approval.

The board had a formal hearing of the case N.C. Department of Agriculture and Consumer Services, Structural Pest Control and Pesticides Division, v. Mamie W. Ellis (IR2016-96(A) and (IR17-120)). After hearing testimony, reviewing documents, and discussing the case, the board decided to revoke Ms. Ellis' pesticide license for two years effective June 12, 2018. Ms. Ellis was also assessed a civil penalty of \$3,000.

July 10, 2018

Assistant Attorney General Chris McLennan presented proposed settlement agreements for the Board's consideration and approval.

Patrick Jones and Patrick Farquhar, SPC&PD, presented an update on the Worker Protection Standard and Auxin technologies. After a brief discussion, the board thanked them for the updates.

Dr. Jerrold T. Moody, Avery County Cooperative Extension Director, presented a final report for the Pesticide Environmental Trust Fund (PETF). Dr. Moody presented a report on the design and construction of an inexpensive demonstration pesticide storage, mixing, and loading facility for small farmers. After a brief discussion, the board thanked Dr. Moody for his work.

Jim Burnette, SPC&PD, gave an update on the new Agricultural Sciences Building, highlighting the interior layout and design.

November 13, 2018

Sydney Morris and David Dilling, Leading Edge Technology, gave an overview of UAV technology and their company's use of the technology in building drones. After a brief discussion, the board viewed a live demonstration of drone technology.

Jason Williams, SPC&PD, requested funding in the amount of \$2,000.00 from the Pesticide Environmental Trust Fund for the printing of 3,000 copies of the new record keeping manual. The board approved the request.

Renee Woody, SPC&PD, presented the 2018 John L. Smith Plastic Pesticide Container Recycling Awards. The second place award of \$1,000 went to Stanley County and was accepted by Lori Ivey. The first place award of \$2,000 went to Halifax county and was accepted by Arthur Whitehead Jr. These awards were made possible by a grant from the Pesticide Environmental Trust Fund.

Patrick Farquhar, SPC&PD, requested funding in the amount of \$1,000 from the Pesticide Environmental Trust Fund for the addition of CropCheck to the existing DriftWatch program. Dr. Charlie Cahoon, NCSU, gave his support for the program. The board approved the funding request.

Dr. Wayne Buhler, NCSU, presented a new Pesticide Applicator certification manual for Public Health Pest Management. After a brief discussion, the board thanked Dr. Buhler for his presentation.

Assistant Attorney General Chris McLennan presented proposed settlement agreements for the Board's consideration and approval.

PESTICIDE ENVIRONMENTAL TRUST FUND

Throughout 2018, the North Carolina Department of Agriculture & Consumer Services (NCDA&CS) continued to fulfill the mandate of N.C. General Statutes §143-442 and §143-468 which specify the collection and disposition of environmental assessment fees that pesticide manufacturers and distributors pay when they register pesticide products for sale in North Carolina.

RECEIPTS for 2018

NCDA&CS collected \$570,600.00 in environmental assessment fees from the registration of approximately 15,804 pesticide brands during 2018. The receipts were for products with reported annual North Carolina gross sales of less than \$5,000 was equal to 47.68%, and the receipts were for products with annual sales of \$5,000 or more was equal to 52.32%. (The annual environmental assessment/product is \$25 or \$50 per brand, respectively.)

BALANCES for 2018

Initial receipts from pesticide registrants paying PETF assessments are deposited into the NCDA&CS Pesticide Environment Assessment Fund (PEAF, Account No. 6136). Transfers are made from Account No. 6136 according to North Carolina G.S. § 143-468(b) as follows: 25% to agromedicine and 75% to the Pesticide Environmental Trust Fund (PETF, Account No. 6137), the account which is used by NCDA&CS to sponsor the various pesticide environmental programs summarized in this report.

As of December 31, 2018, there was a balance of \$421,305.13 in Account No. 6136 and a balance of \$225,459.00 in Account No. 6137. The total amount in both accounts as of December 31, 2018 was \$646,764.13.

EXPENDITURES FOR 2018

During 2018, NCDA&CS accrued a total of \$570,600.00 from pesticide product registration fees.

As specified in North Carolina G.S. § 143-468(b), PETF funds were distributed to North Carolina State University (NCSU), NC A&T State University and East Carolina University for operational expenses associated with administering and implementing a statewide agromedicine program; each university received 2.5% of the total PETF receipts collected during the calendar year. Twenty-percent of the total PETF receipts were used to support the agromedicine information specialist position in NCSU's Environmental & Molecular Toxicology Department. The aggregate amount of PETF funds spent on agromedicine during 2018 was \$149,988.99.

The NC Pesticide Board approved projects for DriftWatch/CropCheck, Production 2018 Auxin Recordkeeping Manuals, Developing a Searchable Version of the Ag Chemicals Manual, Avery County Pesticide Demonstration/Storage Facility, Production of 2019 Auxin Recordkeeping Manuals, and Bilingual Translation Position, awarding of a total of \$78,510.00.

Funds from the PETF totaling \$40,223.00 were awarded to support local recycling of plastic pesticide containers during 2018.

Funds from the PETF totaling \$160,573.00 were disbursed for pesticide disposal assistance during 2018.

REFUNDS FOR 2018

There were no refunds for 2018

CUMULATIVE PETF FIGURES (1993-2018)

As of December 31, 2018, a total of \$11,280,232.00 in receipts has been collected since the inception of the PETF.

Since 1993, PETF has provided a total of \$3,004,555.83 for support of agromedicine in North Carolina.

Expenditures for pesticide environmental programs between 1995 and 2018 have totaled \$7,779,427.48*.

*does not include NCDA&CS Pesticide Disposal Assistance Program

Summary of Pesticide Environmental Trust Fund Projects for 2018

WPS Respiratory Protection Support (\$30,000.00) [2017-2020]

A project through the North Carolina Agromedicine Institute to assist agricultural establishments across the state comply with EPA Worker Protection Standard (WPS) mandates for respiratory protection by providing a 50/50 cost share for the purchase of respirators and/or cartridges through an NC Agromedicine Institute training events or by submitting paperwork for reimbursement of equipment purchased through another source. A 6-month no-cost extension was granted for this project.

Design and Construction of an Inexpensive Demonstration Pesticide Storage, Mixing, and Loading Facility for Small Farmers (\$15,360.00) [2018]

An educational and storage facility located at the Avery County Cooperative Extension Service office utilized for the demonstration of pesticide mixing and loading, and storage of unwanted pesticides until they may be disposed of by the NCDA&CS Pesticide Disposal Assistance Program.

Temporary Bilingual Specialist I Position (\$25,480.00) [2018]

To meet the demands for bilingual translation needs across the North Carolina Department of Agriculture & Consumer Services, Structural Pest Control & Pesticides Division, a Temporary Bilingual Specialist I Position was created to translate licensing exams, worker protection standard information, brochures, and other outreach materials.

Production of Auxin Herbicide Record-keeping Manuals (\$15,000.00) [2018]

EPA approved pesticide labels and North Carolina Supplemental 24(c) labels for the auxin technology dicamba herbicides; Xtendimax, Fexapan, and Engenia require applicators to keep very extensive, detailed records of their applications, over and above the requirements for all Restricted-Use Pesticides (RUP). The Auxin Herbicide Record-Keeping manual provides a simple, organized way for them to do so.

2018 Version of the Auxin Herbicide Record-keeping Manual (2,000.00) [2018]

Updated version of the recordkeeping manual to include pesticide label changes new application and recordkeeping requirements.

Developing an Enhanced Searchable Version of the North Carolina Agricultural Chemicals Manual (\$15,000.00) [2018]

A project to develop an enhanced web-based searchable version of the North Carolina Agricultural Chemicals Manual. For over 40 years the annually produced manual has been a primary source of information on selecting appropriate and effective pesticides to use in managing pest problems.

DriftWatch – BeeCheck – CropCheck (\$7,500.00) [2018]

DriftWatch - a web-based mapping tool created to promote communications between producers of specialty crops (high value crops) and pesticide applicators in support of ongoing stewardship activities. Designed to alert applicators where specialty crop fields and beehives are located before their applications of pesticides.

BeeCheck – a web-based mapping tool created for beekeepers (hobby, sideline, and commercial) to map apiaries, purchase signs, and flags.

CropCheck – a web-based mapping tool allowing growers of genetically modified crops to register their fields.

Pesticide Disposal Assistance Program

The North Carolina Pesticide Disposal Assistance Program, created by the North Carolina Department of Agriculture & Consumer Services, provides the public a legal, free-of-charge, environmentally acceptable mechanism to dispose of unwanted or unusable pesticides. The Pesticide Disposal Program is a public service stewardship program contained within the Structural Pest Control and Pesticides Division.

The Pesticide Disposal Assistance Program disposes of pesticides collected at designated single day disposal collection sites and at permanent household hazardous waste collection sites across the North Carolina. In 2018, the Pesticide Disposal Assistance Program supervised the collection and disposal of 182,494 pounds of pesticide waste at a total of 123 collection events. A total of 43 single day disposal events were organized by NCDA&CS with NC Cooperative Extension during 2018. NCDA&CS also assisted 100 counties in disposal of pesticides collected at permanent household hazardous waste (HHW) sites. A participant must notify the Pesticide Disposal Assistance Program prior to taking unwanted pesticides to a HHW site.

Pesticide Container Recycling Report for PETF in 2018

Farmers and commercial applicators participated in the recycling of plastic pesticide containers by transporting their empties to collection sites that were established by county agencies. USAg Recycling, Inc., the ACRC approved recycler for North Carolina, reported that 491,017 pounds of plastic pesticide containers were recycled. Since 1995, over 8.8 million pounds of pesticide containers have been recycled, which was the first year that Pesticide Environmental Trust Fund grants were awarded to counties for pesticide container recycling programs. Seventy counties were participating in this recycling program during the year. The recycled plastic is sold by USAg Recycling, Inc. to companies that make industrial type products. North Carolina currently ranks 8th in the nation in pesticide container recycling.

Pesticide Environmental Trust Fund grants were awarded to Beaufort, Chatham, Craven, Jackson, Pasquotank, and Sampson counties. The total funding awarded to these counties was \$32,223.00. The grant funds were used to purchase 40-foot cargo containers, treated posts, plastic bags, signs, and pressure rinse nozzles.

Pesticide Inspector IIs visited 144 recycling sites across the state to check on the cleanliness of pesticide containers being stored for recycling and discussed any problems with individuals involved in the inspection of the containers and the education of farmers, commercial applicators, and collection site staff. They gave farmers jet rinse nozzles to aid in the rinsing of empty containers and calibration cups to improve the accuracy of the amount of pesticides applied with sprayers.

These grants have enabled counties to create and enhance pesticide container recycling programs for farmers and commercial applicators, which reduces the burden on landfills, protects human health and the environment by reducing the threat of improper rinsing and disposal, and ensures the user is in compliance with state regulations that prohibit open dumping, burning, and water dumping of pesticide containers.

NORTH CAROLINA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
STRUCTURAL PEST CONTROL AND PESTICIDES DIVISION

***** PESTICIDE DISPOSAL ASSISTANCE PROGRAM (PDAP) *****

PDAP NOTEABLE ITEMS for 2018

***This Current 6-Year Run Is The TOP 6 HIGHEST Annual Total Pounds !!!
Over 182K lbs Collected In 2018 AND 4th Highest Program Total Ever !!!***

2018 ANNUAL TOTALS				
<u>SEASON</u>	<u># Collections</u>	<u># Containers*</u>	<u>Drum/MB</u>	<u>Pounds**</u>
SPRING 2018 TOTAL	58	3,911	9/1	87,297
FALL 2018 TOTAL	65	4,492	15/0	95,197
2018 TOTAL	123	8,403	24 / 1	182,494

*number of containers are not tallied at HHW Collection Events
**bulk liquid drum weights, as an average, are included in total pounds

2018 PESTICIDE COLLECTIONS EVENTS

**NCDA&CS - PDAP with COOPERATIVE EXTENSION
SINGLE-DAY PESTICIDES ONLY EVENTS**

ALLEGHANY COUNTY	GATES COUNTY	ONSLow COUNTY
ANSON COUNTY	GRANVILLE COUNTY	PAMLICO COUNTY
AVERY COUNTY	HALIFAX COUNTY	PITT COUNTY
BEAUFORT COUNTY	HENDERSON COUNTY	RICHMOND COUNTY
BLADEN COUNTY	HERTFORD COUNTY	ROBESON COUNTY
CARTERET COUNTY	HOKE COUNTY	ROWAN COUNTY
CASWELL COUNTY	HYDE COUNTY	SAMPSON COUNTY
CHEROKEE COUNTY	IREDELL COUNTY	SWAIN COUNTY
CHOWAN COUNTY	JONES COUNTY	UNION COUNTY
COLUMBUS COUNTY	LINCOLN COUNTY	WAKE COUNTY
CUMBERLAND COUNTY	MACON COUNTY	WASHINGTON COUNTY
CURRITUCK COUNTY	McDOWELL COUNTY	WILSON COUNTY
DARE COUNTY	MOORE COUNTY	YADKIN COUNTY
DAVIDSON COUNTY	NASH COUNTY	YANCEY COUNTY
DURHAM COUNTY		

**NCDA&CS - PDAP ASSISTED
HHW COLLECTION EVENTS**

ALAMANCE CO HHW	FORSYTH CO HHW	NEW HANOVER CO HHW
ASHE CO HHW	GASTON CO HHW	ONSLow CO HHW
AVERY CO HHW	GRANVILLE CO HHW	PERSON CO HHW
BRUNSWICK CO HHW	HARNETT CO HHW	RANDOLPH CO HHW
BUNCOMBE CO HHW	HENDERSON CO HHW	SAMPSON CO HHW
CABARRUS CO HHW	HERTFORD CO HHW	STANLY CO HHW
CATAWBA CO HHW	IREDELL CO HHW	SURRY CO HHW
CLEVELAND CO HHW	JOHNSTON CO HHW	TRANSYLVANIA CO HHW
CUMBERLAND CO HHW	LEE CO HHW	UNION CO HHW
CURRITUCK CO HHW	MADISON CO HHW	WATAUGA CO HHW
DARE CO HHW	MOORE CO HHW	WAYNE CO HHW

*MULTIPLES AND VARIOUS OTHER COLLECTIONS NOT LISTED
ARE INCLUDED IN THE TOTAL POUNDS LISTED ABOVE*

DEFINITIONS ADOPTED

Table I lists the analytical results of formulation samples based on the following:

“PASSED” - signifies that all active ingredients were found to be present at acceptable levels based on the label guarantee.

“Failed Due to Deficient Active Ingredient” – signifies that one or more active ingredients fell significantly below the guarantee. Such products are placed under “Stop Sale Order” and are removed from the market place.

“Failed Due to Excessive Active Ingredient” - indicates a significant excess of one or more active ingredients. Since such formulations could be harmful to the user and/or result in excessive residues, these products are placed under “Stop Sale Orders” and are removed from the market place.

Table II lists manufacturers that had products placed under “Stop Sale Orders” due to the following:

“Unregistered” - signifies that the product was not registered at the time it was found by a pesticide inspector in the marketplace. Any such product is required to be registered prior to release from a “Stop Sale Order.” A delinquent registration penalty is also assessed against the manufacturer.

“Misbranded” - indicates that the labeling of a pesticide product failed to conform to federal and/or state requirements.

**Table I - Analytical Results of Formulation
Samples Collected During 2018**

Name and Address of Company	SAMPLES		
	Passed	Deficient Active Ingredient	Excessive Active Ingredient
Adama Raleigh, NC	7	-	-
Albaugh Inc. Cordova, TN	6	-	-
Alligare LLC Opelika, AL.....	1	-	-
Ambrands Salem, VA.....	2	-	-
Amvac Chemical Corporation Newport Beach, CA.....	1	-	-
Arysta Life Science NA Cary, NC.....	1	-	-
BASF RTP, NC.....	3	-	-
Bayer Advanced, LLC Research Triangle Park, NC.....	9	-	-
Bayer Crop Science LP Research Triangle Park, NC.....	4	-	-
Bayer Environmental Sciences Research Triangle Park, NC.....	2	-	-
Bayer Healthcare, LLC Animal Shawnee Mission, KS.....	3	-	-
Bonide Products Inc. Oriskany, NY	21	1	-
Cape Fear Chemicals Elizabethtown, NC.....	1	-	-
Central Garden and Pet Salem, VA	2	-	-
Chemnico, Division of United Industries St. Louis, MO.....	1	-	-
Chem-Tech LTD Des Moines, IA	2	-	-
Control Solutions Inc. Pasadena, TX	11	-	-
Dow Agrosiences, LLC Indianapolis, IN.....	6	-	-
Drexel Chemical Company Memphis, TN	8	-	-
Du Pont de Nemours and Company, E.I. Newark, DE.....	2	-	-
Durvet Inc. Blue Springs, MO	1	-	-
Farnam Companies Inc. Phoenix, AZ.....	3	-	-
FMC Corporation/Agricultural Products Philadelphia, PA	2	-	-
Gro Tec, Inc. Covington, GA	3	-	-
Happy Jack Inc Snow Hill, NC.....	2	-	-
Harris Mfg. Co. Cartersville, GA	1	-	-
Johnson, S.C and Son, Inc. Racine, WI	6	-	-
Lesco, Inc. Cleveland, OH	3	-	-
Loveland Industries Inc. Greeley, CO	10	-	-
Manna Pro Products LLC Chesterfield, MO.....	1	-	-
Monsanto Agricultural Company St. Louis, MO.....	8	-	-

**Table I - Analytical Results of Formulation
Samples Collected During 2018**

Name and Address of Company	SAMPLES		
	Passed	Deficient Active Ingredient	Excessive Active Ingredient
Nufarm Inc. Burr Ridge, IL.....	5	-	-
Orgill Inc. Collierville, TN.....	1	-	-
Ortho Group, The Marysville, OH.....	13	1	-
PBI/Gordon Corporation Kansas City, MO.....	16	-	-
Prime Source, LLC Hockessin, DE.....	1	-	-
Pyranha Inc. Hillboro, MO.....	2	-	-
Ragan and Massey, Inc. Fallon, NV.....	5	-	-
Redeagle International Lakeland, FL.....	1	-	-
Sawyer Products Safety Harbor, FL.....	1	-	-
SBM Life Science Corp Cary, NC.....	5	-	-
Scott Company, The Marysville, OH.....	2	-	-
Senoret Chemical Company Inc. Lititz, PA.....	2	-	-
Sipcam Agro USA, Inc. Roswell, GA.....	1	-	-
Southern Agricultural Insecticides Inc. Palmetto, FL.....	6	-	-
Spectrum Group, Division of United Industries St. Louis, MO.....	12	-	-
Sterling International Spokane, WA.....	1	-	-
Syngenta Crop Protection Greensboro, NC.....	10	1	-
Tech Pac LLC Covington, GA.....	4	-	-
Tenkoz Inc. Alpharetta, GA.....	6	-	-
Tessengerlo Kerley, Inc. Phoenix, AZ.....	1	-	-
United Industries Corp St. Louis, MO.....	3	-	-
United Phosphorus, Inc. King of Prussia, PA.....	2	-	-
Valent USA Corporation Walnut Creek, CA.....	1	-	-
Voluntary Purchasing Groups Inc. Bonham, TX.....	21	-	-
Willert Home Products, Inc St. Louis, MO.....	1	-	-
Winfield Solutions St. Paul, MN.....	6	-	-
Young Inc. Longmeadow, MA.....	1	-	-
Zep Com Sales and Service Atlanta, GA.....	2	-	-

Table II - Manufacturers Found to Have Unregistered or Misbranded Products in the Marketplace During 2018

Name and Address of Company	SAMPLES	
	Unregistered	Misbranded
Adama		
Raleigh, NC	1	-
Alden Leeds Inc.		
So. Keamy, NJ	1	-
Betco Corporation		
Bowling Green, OH	1	-
Bonide Products, Inc.		
Oriskany, NY	1	-
Botanically Rooted		
Greensboro, NC	5	5
Champion Packaging and Dist. Inc.		
Woodridge, IL	1	-
Earth Animal Ventures		
Southport, CT	5	-
Enviro Protection Industries		
Kirkwood, NY3	-
Greenerways LLC		
Yardley, PA	2	-
Healing Tree Products		
Fallon, NV	1	-
Homs LLC		
Pittsboro, NC	4	1
Honey Guy		
Winona, TX	2	2
Horse O Peace		
Winston-Salem, NC	2	2
Inspiration Inc.		
Moorpark, CA	1	1
Jonathan Green Inc.		
Farmingdale, NJ	1	-
Kittrich Corporation		
Pomona, CA	1	-
Kordon LLC		
Newe Castel, VA	1	-
Lafe's Natural Bodycare		
Austin, TX	1	1
Lice B Gone Cap		
Belleville, IL	1	1
Martner Biomedical Inc.		
San Jose, Ca	1	-
NaturChem Inc.		
Lexington, NC	1	-
Nature Zone		
Chico, CA	1	-
North American Herbs and Spice		
Buffalo Grove, IL	2	2
Organic Laboratories Inc.		
Stuart, FL	1	-
Pool Water Specialist		
Charlotte, NC	1	-
Preserve International		
Reno, NV	1	-
Prudent Enviro Products Inc.		
Greensboro, NC	1	1
R&B's Outer Banks/Skeeter Beater		
Hertford, NC	1	-
Reckitt Benckiser Nordic		
Soborg, Denmark	1	1
Saratoga Veterinary Products		
N/A	1	1
Shanghai Daisy LLC.		
Yorkville, IL	1	-

Table II - Manufacturers Found to Have Unregistered or Misbranded Products in the Marketplace During 2018

Name and Address of Company	SAMPLES	
	Unregistered	Misbranded
Schultz LLC		
Earth City, MO	1	-
Smith Janitorial Service and Supply		
Charlotte, NC.....	1	-
Synergy Labs		
Ft. Lauderdale, FL	5	-
Ticks-Off		
Tehachapi, CA	2	2
Tree World – USA		
St. Joseph, MO	2	-
Universal Inc.		
Maryland Heights, MO.....	1	-
U.S. Nonwovens Corp.		
Brentwood, NY	2	-
Voluntary Purchasing Groups		
Bonham, TX	1	-
Wondercide		
Austin, TX.....	1	-

**Summary of 2018
Program Activities Performed
Under the N. C. Pesticide Law of 1971**

PESTICIDE REGISTRATIONS

Total Number of Registrants	1,679
Registrants from North Carolina	116
Pesticide Products Registered	15,804
Section 24(c) Registrations	59
Section 18 Exemptions.....	6
Product Registration Checks	333

COMPLIANCE MONITORING

Inspections	10,122
Worker Protection	378
Investigations	87
Citizen's Inquiries.....	105
Physical Samples Submitted for Analyses	
Formulation.....	281
Investigation	253
Domestic Wells	35

REGULATORY ACTIONS

Stop-Sale, Stop Use, Removal Orders	4
License or Certification Suspensions	0
License Revocations	1
Civil Penalties.....	52
Notices of Noncompliance	325
Notices of Warning	11
Delinquent Registration Penalties	\$ 2,800.00

COURSES APPROVED

Number of courses	1,337
Number of credits issued	2,851

EXAMINATIONS

Exams Administered	5,844
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LICENSED APPLICATORS

Pesticide Dealer Licenses	802
Ground Pesticide Applicator Licenses	13,719
Aerial Pesticide Applicator Licenses.....	197
Public Operator Licenses.....	6,375
Pest Control Consultant Licenses	142
Total Pesticide Licenses	21,235

**Summary of 2018
Program Activities Performed
Under the N. C. Pesticide Law of 1971**

CERTIFIED APPLICATORS

Private Pesticide Applicators..... 13,072

PESTICIDE ENVIRONMENTAL TRUST FUND

Active Projects..... 7

Deposits..... \$ 570,600.00

Disbursements \$ 449,071.99

 Agromedicine Program..... 149,988.99

 Pesticide Disposal Assistance Program 160,573.00

 Container Recycling Program 60,000.00

 Other Environmental Projects 78,510.00

PLASTIC PESTICIDE CONTAINER RECYCLING

Number of Counties with active programs..... 70

Total weight collected 491,017

PESTICIDE DISPOSAL ASSISTANCE PROGRAM

Containers 8,403

Drums 24

Pounds 182,494

Collection Events..... 123

OUTREACH

Fairs and/or Trade Shows..... 17

Presentations at Recertification Classes..... 278