

MICHAEL GERARD WALDVOGEL

BUSINESS ADDRESS:

Department of Entomology
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EDUCATION/TRAINING:

B.S. (Biology) - Iona College (1973)
M.S. (Biology) - Fordham University (1976)
M.S. (Entomology) - The Pennsylvania State University (1980)
Ph.D. (Entomology) - North Carolina State University (1986)

NC Structural Pest Control Certified Applicator CA3437PWF
NC Wildlife Damage Control Agent – 01-053

CURRENT POSITION - Extension Specialist – NC Cooperative Extension Service, NCSU (since 1989); faculty member of NC Agromedicine Institute

Current Extension Responsibilities (since 1992) (82%)

Management of structural and industrial pests including cockroaches, ants, rodents and termites. Provide direct assistance to pest management professionals and other industrial clients to solve specific pest problem situations. Educational programs emphasizing IPM in the residential and industrial settings are offered to pest management professionals, state and municipal agency employees, the business community (such as home inspectors) and to the general public through the county Cooperative Extension Service programs, such as ServSafe®. Other activities include Pesticide Applicator Certification training in structural pest control for pest management professionals and non-commercial applicators in the Household Pests (P), Wood Destroying Pests (W), and Structural Fumigation (F) phases

Major Projects:

Field efficacy trials of termiticides
Pest Management in Schools and Municipalities
Pest Management in Long Term Care Facilities
Formosan subterranean termite control program (western NC)

Teaching (18%)

Ornamentals and Turf Insects (ENT 063) – Spring semesters (two lectures; 5 lab sections in 2004)
Vertebrate Pest Management (ENT 072) – Spring Semesters (alternate years)

Committee Assignments: (list limited to those relevant to current position)

NC Structural Pest Control Committee. (Vice-chair) (state regulatory committee)
Certification and Licensing Examination Review Committee
NCSU College of Ag. and Life Sciences - Turf Work Group
NCSU CALS – Academic Computing Advisory Committee (member and former chair)
NCSU Campus Pesticide Use Committee
North Carolina Pest Control Association (NCPCA) - Annual School Program Committee
NCPCA – Wood-Destroying Insect Inspector Accreditation Program Committee

Professional Memberships:

Entomological Society of America
National Pest Management Association
NC Trappers Association
Turfgrass Council of North Carolina

Grants (recent)

Pilot Program for IPM in Schools, M. Linker, C. Schal, M. Waldvogel (07/01/99 - 06/30/00), NC Pesticide Environmental Trust Fund. \$140,000

Integrated pest management in confined swine production, C. Schal, M. Stringham, M. Waldvogel, W. Watson (09/15/98-09/30/00) USDA-CREES, \$156,161

Action thresholds and residue analysis for integrated pest management in North Carolina elementary schools. C. Schal, M.G. Waldvogel, H. M. Linker (9/02 – 8/04). Environmental Protection Agency, \$39,976.

Monitoring –guided actions thresholds for cockroach control in elementary schools. C. Schal, H.M. Linker and M.G. Waldvogel (9/02 – 2/04), NC Biotechnology Center, \$38,781

Improving Pest Control in Long Term Care Facilities That House Frail Elders. M. Waldvogel (PI), (4/04-5/05). NC Pesticide Environmental Trust Fund. \$15,500.

Miscellaneous Industry Funding - \$152,000

PUBLICATIONS: (list has been limited to a selection relevant to topic)

Book Chapters and Proceedings:

Apperson, C. S., and M. Waldvogel. 1997. Bites, Stings and Envenomization Hazards in Agriculture and Forestry. In *Safety and Health in Agriculture, Forestry and Fisheries*. Langley et al. (Eds.) Government Institutes, Rockville MD.

Waldvogel, C.B. Moore, G. W. Nalyanya, SM Stringham, DW Watson, C Schal. 1999. *Integrated cockroach (Dictyoptera, Blattellidae) management in confined swine production*. 3rd Int. Conference on Urban Pests, July 19-22, Prague, Czech Republic.

Extension Publications and Bulletins

- Apperson, C. S. and M. G. Waldvogel. 1995. **Insect Repellent Products** (ENT/rsc-5)
- Apperson, C. S. and M. G. Waldvogel. 1995. **Mites that "Bug" People** (ENT/rsc-2)
- Apperson, C. S. and M. G. Waldvogel. 1995. **Mosquito Control Around the Home and in Communities.** (ENT/rsc-6)
- Apperson, C. S., L. Garcia, and M. Waldvogel. 1999. **Control of the red imported fire ant.** NCCES Pub. AG-486.
- Apperson, C. S., and M. Waldvogel. 1999. **Biting Midges and their control.** NCSU - Dept. of Entomology, Insect Note: ENT/rsc-17
- Apperson, C. and M. Waldvogel. 1999. **Avoiding bites and stings in Christmas tree plantings.** American Christmas Tree Journal 43: 14, 17-18.
- Apperson, C.S. and M. Waldvogel. 2000. **Horse Flies and Deer Flies.** NCSU- Dept. of Entomology, Insect Note: ENT/rsc-32.
- Jahn, L.G., S.D. Kirby and M.G.Waldvogel. 2004. **A Guide to the Inspection of Existing Homes for Wood-Inhabiting Fungi and Insects.** NC State University - AG-321 (Revised)
- Vining, J. and M. Waldvogel. 1998. **Scorpions in Western North Carolina.** NCCES Information Leaflet.
- Waldvogel, M. 1999. **Biology And Control Of Subterranean Termites,** NCSU-Dept. of Entomology, Insect Note: ENT/rsc-21.
- Waldvogel, M. 1999. **Termite Baits,** NCSU-Dept. of Entomology, Insect Note: ENT/rsc-20.
- Waldvogel, M. 1999. **Termite Prevention - Approaches for New Construction,** NCSU- Dept. of Entomology, Insect Note:ENT/rsc-24
- Waldvogel, M. 1999. **Termite Treatments Around Wells and Drains,** NCSU- Dept. of Entomology, Insect Note:ENT/rsc-22
- Waldvogel, M. 1999. **Termite Prevention - Preventive Measures for Existing Homes** NCSU- Dept. of Entomology, Insect Note: ENT/rsc-23
- Waldvogel, M. 2000. **Millipedes.** NCSU- Dept. of Entomology, Insect Note:ENT/rsc-18
- Waldvogel, M. 2000. **Earwigs.** NCSU- Dept. of Entomology, Insect Note:ENT/rsc-19
- Waldvogel, M. 2000. **Pests of Stored Foods.** NCSU- Dept. of Entomology, Insect Note: ENT/rsc-27
- Waldvogel, M. 2002. **Fungus Gnats.** NCSU- Dept. of Entomology, Insect Note: ENT/rsc-29

Waldvogel, M. 2000. **Drain Flies**. NCSU- Dept. of Entomology, Insect Note:ENT/rsc-30

Waldvogel, M. 2002. **Springtails**. NCSU- Dept. of Entomology, Insect Note: ENT/rsc-33

Waldvogel, M. and C. S. Apperson. 2000. **Bed Bugs**. NCSU- Dept. of Entomology, Insect Note:ENT/rsc-31

Waldvogel, M. and L. Jahn. 2000. **Fact Sheet on Powderpost Beetles and Wood-Inhabiting Fungi**. NCSU-Dept. of Entomology, Insect Note: ENT/rsc-26.

Waldvogel, M., C. Apperson, S. Bambara, M. Stringham and P. Bromley. 2000. Storm-Related Pest Problems (web site)

Other Publications and Training Materials:

Laboratory Notebook for Turf and Ornamental Entomology, C.G. Wright and M.G. Waldvogel. North Carolina Registered Technician Training Program (slide set)

Integrated Pest Management in Food Service (slide set)

Nalyanya, G., H.M. Linker, M.G. Waldvogel, C.Schal 2002. *Integrated Pest Management for North Carolina Schools* (AG-631)

McRackan, R. and M. Waldvogel. 2004. North Carolina P-Phase Certified Applicator Manual (in production)

McRackan, R. and M. Waldvogel. 2004. North Carolina W-Phase Certified Applicator Manual (in production)

McRackan, R. and M. Waldvogel. 2004. North Carolina F-Phase Certified Applicator Manual (in revision)

Recent Talks: (limited to relative topics)

Management of Arthropod Pests. Southern States Cooperative Management Training Session. Oct. 1995.

Pest Management in Schools. Pitt County Schools Maintenance Employee meeting. 1999

IPM in Food Handling Facilities (eleven county-based ServSafe® training programs, 1998-2002)

Pest Management in Schools. Halifax County Schools Maintenance Employee meeting. 1999

Carpenter Ants, NCPA Regional Workshops, 1999

Silverfish, NCPA Regional Workshops, 1999

Carpenter Bees, Joint Summer Meeting: NC Pest Control Assoc./SC Pest Control Assoc. 1999

Integrated cockroach (Dictyoptera, Blattellidae) management in confined swine production. 3rd Int. Conference on Urban Pests, July 19-22, 1999. Prague, Czech Republic.

Control of the Red Imported Fire Ant, NCPA Regional Workshops, 2000

Storm-Related Pests, NCPA Regional Workshops, 2000

Common Household Pests – Brunswick Co. CES. Master Gardeners Training, 2000

IPM in Schools, NCPA Regional Workshops (six), 2001

IPM in Schools, NC School Maintenance Association, 2001

Common Household Pests – Caldwell Co. CES. Master Gardeners Training, 2001

Insect Pests of Log Homes, Guilford Co. Coop. Extension Service Homeowner Program, 2001

Troubleshooting Ant Baiting Problems, NCPA Regional Workshops (6), 2002

Exterior Treatments for Control of Subterranean Termites, PCT Magazine Termite Roundtable, Sarasota, FL. 2002

Control of the Red Imported Fire Ant, 2002. NC School Maintenance Association, 2002.

Control of the Red Imported Fire Ant, 2002. Wilson Co. CES, Master Gardeners Training

Principles of IPM in Schools – School IPM Training Workshops (three locations), 2002

Advanced Training in IPM for Schools – four locations, 2002.

Cockroach and Ant Control in Residences. Goldsboro housing employees. 2002.

Millipedes and Other Nuisance Pests, pest technician training, Pest Management Systems, Greensboro, 2002.

Pest Problems in Food Production Facilities – NC Mosquito and Vector Control Association Spring Meeting, 2002.

Hot Months – Hot Pests – NC Mosquito and Vector Control Association – Fall Meeting, 2002.

Common Household Pests – Wake Co. Master Gardeners Training, 2002

Termite Biology and Control – Carteret Co. CES Master Gardeners Training, 2002

Common Household Pests – Carteret Co. CES Master Gardeners Training, 2002

Pesticide Applicator Certification Training – Core, Household, Wood Destroying and Fumigation phases of structural pest control, NCPA Pest Control School, Jan. 1992-2002

Common Household Pests – Carteret Co. CES Master Gardeners Training, 2002

Efficacy & Compliance Testing of Termiticides – Advanced Topics in GLP/QA Training, National Weed Science Society, Houston, TX (Jan. 2003).

Perimeter Treatments for Control of Subterranean Termites - Kansas Pest Control Association Winter Meeting, 2003

Carpenter Ants – Biology and Control, Kansas Pest Control Association Winter Meeting, 2003

Up on the Roof - Moisture-Related Pests, Kansas Pest Control Association Winter Meeting, 2003

Efficacy of Perimeter Treatments for Control of Termites – NCPA Regional Workshops (6), 2003

Troubleshooting Moisture-Related Pests, NCPA Regional Workshops (6), 2003

Selecting and Integrating Pest Control Strategies – School IPM Regional Workshops (3), 2003

Common Household Pests – Mecklenberg Co. CES Master Gardeners Training, 2003

Bed Bugs- NC Mosquito and Vector Control Association, Nov. 2003

IPM for Long-term Care Facilities I – Principles of IPM, 2004 – five workshops for nursing home and longterm care facility managers and regulatory agency employees.

IPM for Long-term Care Facilities II – Advanced Training, 2004 – five workshops for nursing home and longterm care facility managers and regulatory agency employees.

IPM for Long-term Care Facilities III – Pest Management Professionals, 2004 – five workshops for nursing home and longterm care facility managers and regulatory agency employees.

Wood-Destroying Pests, 2004, Two-workshop part of “Best Practices for Home Inspectors”

Wood-Destroying Insects, 2004. Three-hour workshop for Professional Housing Rehabilitators Association of NC meeting. Raleigh, NC

IPM in Food Service Facilities - part of the ServSafe® Food Safety Program: presentations given in last 5 years: 40