WHERE THERE'S A WILL THERE'S A WAY

Children's health and worker safety are driving concerns that have spurred parents and school employees across the country to take action to reduce school pesticide use. Working in coalitions with others, individuals have used persistence, education, and common sense to turn personal tragedies into positive action. When necessary, they have used creative and powerful strategies such as petition drives, media coverage, demonstrations of pesticide alternatives, and more to convince schools to voluntarily modify pest control practices. At the same time, increasing numbers of local and state governments are taking steps to mandate or encourage pesticide use reduction in schools.

Many resources are available, and a lack of technical or financial support generally has not been a barrier. The most important thing that successful programs have in common is people with open minds and the will and motivation to find alternatives and make them work. Don't wait for a tragedy to happen at your school. Take inspiration from these efforts and work to reduce pesticide use in your community's schools today!

BY BECKY RILEY

Are pesticide-free schools possible? The answer probably depends on climate and environment, the condition of the buildings, community and building occupant attitudes toward pests, and how broadly you define the term pesticide. But one thing is clear. Reducing or eliminating the use of conventional organophosphate and carbamate insecticides (and phenoxy or other conventional herbicides) is not only possible, but is being done in a growing number of school districts around the country. Furthermore, schools are now recognizing that application of pesticide poisons by techniques such as fogging, broadcast, or baseboard spraying is inappropriate in school settings where children spend many of their waking hours.

Integrated pest management (IPM) can briefly be described as a thoughtful approach to pest control. Although it does not prohibit all use of pesticides, it goes beyond pesticide bans in requiring that pest prevention and exclusion measures be taken. Because it addresses *causes* of pest infestations, it is often more effective than conventional "spray and pray" programs. Whether you call it IPM or just plain common sense, this approach can be a good starting point for weaning schools off of pesticides. Many school pest control practitioners enjoy the challenge of working with school occupants to outsmart pests with simple non-toxic measures. They are also rewarded in knowing that they are doing their best to prevent pesticide exposure to children and to themselves.

If your school or district is already doing a good job of controlling pests with little or no pesticide use, be sure to recognize and applaud their efforts. If they are still using conventional pesticides and pest control techniques, offer to work with them to find alternatives. Getting a school or district to reduce pesticide use and adopt IPM practices may be confrontational at first. Don't lose heart. Some school maintenance staff that have been the most successful at reducing pesticide use have admitted to being the strongest sceptics initially. Hopefully with education and persistence, parents and school staff can work cooperatively. Read on for some stories about parents and workers that have successfully convinced their schools to reduce pesticide use, followed by updates on state and local regulation, and lists of resource people and materials.

Becky Riley is NCAP's school pesticide use reduction program associate.

Parents Petition for Change in California

In Canyon Country, California, mother Theresa Tye became concerned when her son Kenny seemed to be sick all the time with headaches, nausea, diarrhea and frequent urination after starting kindergarten at Mitchell Elementary School. The Tye family had become sensitized to chemicals after a previous misapplication of the pesticides Dursban 50W and safrotin at their home. Theresa suspected pesticides might be the cause of her son's health problems, and learned that his symptoms did indeed coincide with pesticide applications being made regularly to the school. The district had a contract with a local pest control operator to do monthly spraying with one of the same chemicals, Dursban 50W, on school lawns in addition to spraying other pesticides inside the school whether or not pests were present.

After hitting a brick wall trying to talk to school district personnel about reducing the use of pesticides, Theresa pulled her son out of school and called the local newspaper. They responded with good coverage of her son's plight. She then recruited a friend and stood in front of the school with a petition asking parents to join her in asking the school to halt spraying. The newspaper ran another story about the petition effort and parents flooded the district with calls.

After trying to remove the parents from school premises several times, the district finally agreed to halt the spraying temporarily and to consider alternatives. The parents organized into a group, the Pesticide Education Network, and continued to meet with school district personnel. They contacted NCAP and other organizations to gather materials, and used them to prepare an information packet about pesticide hazards and alternatives that was distributed at a PTA meeting, and later to the school

board.

Finally, the district agreed to restrict pesticide use district-wide. Organophosphate pesticides such as Dursban 50W are no longer used in or outside the school. Indoor applications of pesticides have been limited to baits and crack and crevice applications of certain approved materials such as boric acid on an "as-needed" basis. Calendar spraying is no longer done. In addition, the district set up a pilot program at Pine Tree Community School to test alternative pest control methods.

The principal at Pine Tree has been very supportive, and a committee has been set up to oversee the new program. A pest control contractor was hired to do monitoring for pest problems. Argentine ants had been a problem at that school, but their entry from outdoors is now controlled by caulking cracks and crevices. New bins have been purchased to hold student lunches, and the bases have been wrapped with sticky tape to prevent ant access. So far they have not been needed. The overall program has been so successful that the committee has recently decided that the contractor is no longer needed and that the custodian can do the pest monitoring. The program will then be even more cost effective, saving the district significantly over the cost of the previous spray program.

Parental and public support for the district's new program is high. When given the choice at the start of the school year, 400 of 900 parents asked to be notified if pesticides were used in their child's school. The Pesticide Education Network continues to educate parents and the community about pesticide hazards and alternatives. The group writes regular articles for the school newsletter, including a recent one on head lice treatments. The mayor of Santa Clarita recently acknowledged the efforts of Pine Tree school at an award ceremony coinciding with a visit by a representative from the regional U.S. Environmental Protection Agency (EPA) who was there to listen to residents' concerns about pesticide use. That visit was organized by Pesticide Watch, a San Francisco-based group. Meantime, Kenny Tye has transferred to Pine Tree and is no longer having health problems. The parents know it will take more work and time to convince the district to expand the pilot program district-wide, but that is their next goal.

A Worker Wises Up in Maryland

At the opposite end of the country in Montgomery County, Maryland, veteran pest control operator Bill Forbes is one of three full-time personnel running a very successful school pesticide use reduction program. Forbes started looking for alternative pest control methods back in 1987 after he began to experience some disturbing (and rather embarrassing) symptoms that he and his doctor associated with his chronic exposure to pesticides (especially Dursban TC) on the job at the Montgomery County schools. In particular, he found himself drooling and experiencing blurry vision, chronic stomach upset, and diarrhea.

Forbes is now sensitized and becomes ill if he enters a room that has been treated with organophosphate pesticides. He continues to take anti-seizure medication and another drug to control Parkinson-like symptoms. Because of these health problems, he remains highly motivated to find non-chemical or less toxic ways to control pests at that district's more than 200 school sites. With the support of the district, his program has reduced pesticide use over 95% from previous levels, as well as reduced pest problems and pest control costs.

German cockroaches remain the biggest pest problem faced in the county's schools, and they are now dealt with very successfully using a combination of techniques such as sanitation, caulking, glue boards, and baits. Montgomery County conducts its own field trials with new products or techniques and is continually looking for innovative ways to reduce pests and pesticide use. Forbes has recently started to use a new pressurized foam caulk, and is experimenting with a fungus-based roach control agent. He and his two co-workers spend their day traveling from site to site in the district talking to school staff, doing routine pest monitoring, and occasionally responding to pest reports. Forbes writes up periodic memos to teachers and staff about their role in preventing pest problems, such as using proper sanitation in coffee break rooms, not eating or storing food in office areas, and properly storing pet food.

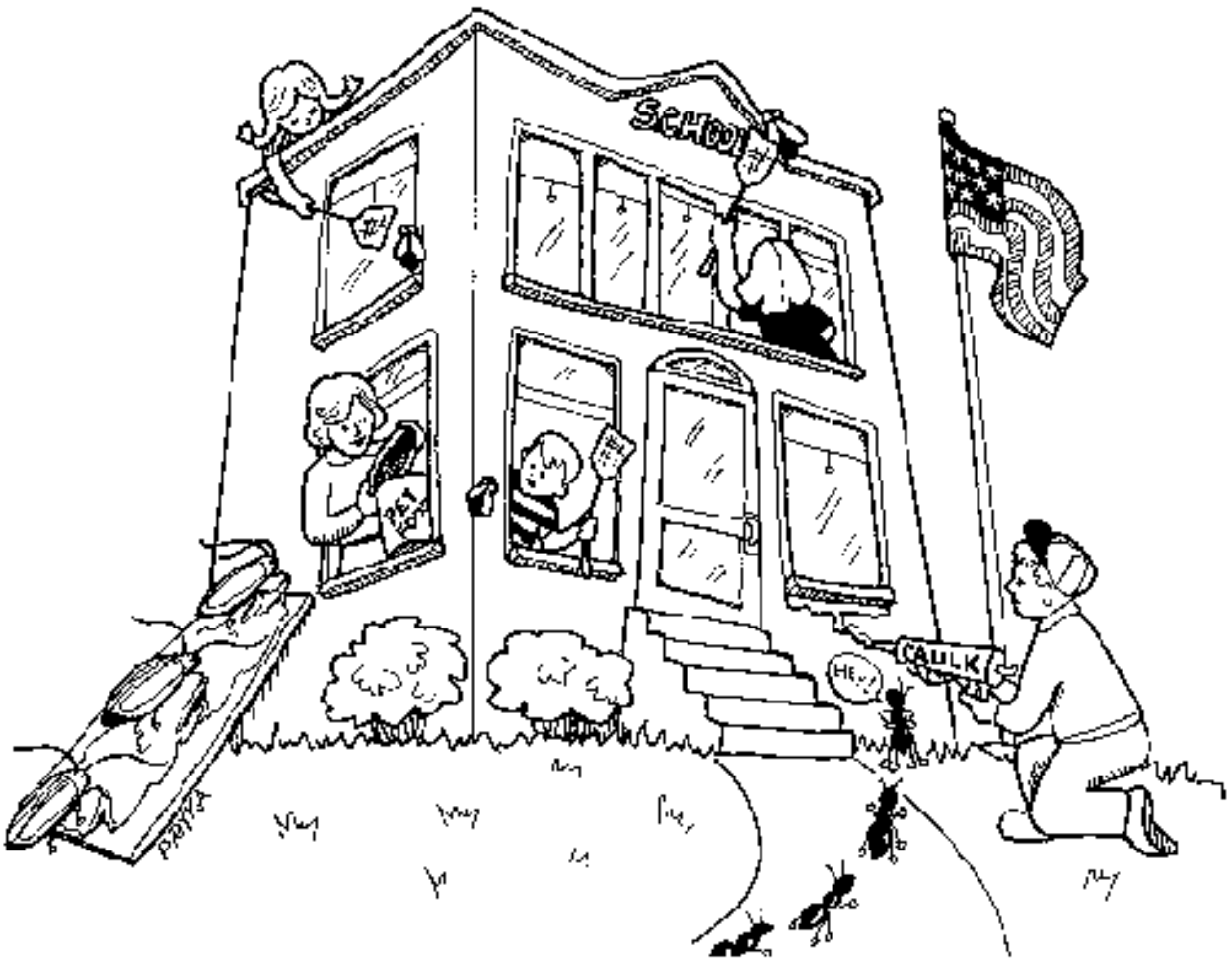
Over the years, he has built a relationship with school staff that has increased their understanding and cooperation with the program. Few people panic when a roach is spotted, and there is little or no pressure for pesticide spraying. They've seen that the alternatives work! A little education and direct occupant involvement has gone a long way.

A Swat Team Goes To Work in Indiana

Flora, Indiana parent Kathy Schultz spent months at the bedside of her 14-year old daughter who was undergoing treatment for non-Hodgkin's lymphoma, a rare cancer that some studies have linked to phenoxy herbicide exposure. After a long battle, her daughter went into remission, and was able to return to school. However, Kathy became terribly upset when, on her daughter's first day back at school, she smelled a chemical odor and determined that the phenoxy herbicide 2,4-D had just been applied to school lawns. Kathy kept her daughter home from school for the next few days. She contacted the school principal and asked him to stop the spraying or at least to notify her in advance so that she could keep her daughter home for a few days if pesticides were used. The principal was concerned, and the head of maintenance offered to meet with her to review the list of chemicals used by the school. In the meantime, heartbreakingly, the girl did suffer a relapse of the cancer, and died a few months later.

While proving a connection between the school's use of 2,4-D and her daughter's cancer would be difficult if not impossible, Kathy felt very strongly that the district was using pesticides unnecessarily, putting all the children and teachers at risk. In addition to regular applications of herbicides on the lawns, the district is situated in the heart of hog-farming country, and was in the habit of regularly fogging classrooms with synthetic pyrethroid pesticides to control flies.

As a parent and teacher, Kathy contin-



ued to gently but firmly pursue her efforts. She found several other parents who shared her concerns, and they met with the superintendent to urge a halt to the pesticide fogging of classrooms. Their initial proposals were rejected, as the superintendent was not convinced that the pesticides posed a health risk. Two mothers told him that they would come to the school with buckets and wash down all student desks if classrooms were sprayed.

When the parents learned that another fogging was planned, they organized a small "swat team" of parents and children who went into classrooms ahead of the scheduled spraying armed with fly swatters. They took just a few hours to rid the school of flies (no more than the fogging operation would have taken). After this successful demonstration, they persuaded the school to call them if flies again became a problem, and to allow them to take care of it first. School officials agreed not to spray unless their efforts failed. The group conducted three swattings before cold weather killed off most of the flies.

Despite initial scepticism on the part of some school district administrators, the parents have made great progress in the past few months. They contacted NCAP and other organizations for information and got pesticide use records from the district. They developed a packet of materials that included a chart of the pesticides used by the school, the frequency with which they were used, and the health hazards of those chemicals. The packet concluded with their recommendations that school spraying be halted until other options could be explored, that an IPM approach be adopted, and that a committee be set up to develop a written school policy. These materials were distributed to the school board, superintendent, principals, maintenance staff, PTO president, and some parents and teachers. Just three weeks later, the school board voted to adopt the recommendations. Persistence, information, and an effective demonstration that alternatives work are paying off. The parents hope to have a written policy governing outdoor and indoor pesticide use in place before spring arrives and the district starts thinking about fogging classrooms again.

Local and State Legislation, Regulation and Guidance

In addition to the efforts of parents and workers to get schools to voluntarily reduce pesticide use, local governments and states are beginning to take an active role in pro-

Table 1
School Pesticide Use Reduction Resources

Videos

New York Department of Health teleconference tape series
1. Introduction to Integrated Pest Management: Dr. Albert Greene (U.S. General Services Administration, 2 hrs)
2. Rats and Mice: Dr. Stephen Frantz (NY State Dept. of Health, 2 hrs.)
3. Ants, Bees, Wasps, Fleas and Flies: Dr. Gary Alpert (Harvard Univ., 90 mins.)
4. Cockroaches: Dr. Austin Frishman (AMF Mgmt. Services, 1hour 45 mins.)
Available from the New York Coalition for Alternatives to Pesticides (NYCAP), 33 Central Ave., Albany, NY 12210. (518) 426-8246. ($12 each or $48 for the set of four, postpaid)

These tapes are segments from a 3-day IPM training teleconference for pest control operators sponsored by the New York Department of Health. The taped speakers present slides detailing the habits and lifecycles of particular pests, and ways to control them using IPM techniques. The first segment gives a general discussion of building IPM (or "modern pest control"), as well as a discussion of cockroach, rat and pigeon control. Some pesticide-containing baits and products are recommended by some speakers, and some products are not registered for use in all states. Viewers are cautioned to use the wealth of information that is in these tapes, but also to ask questions and to continue to challenge unnecessary pesticide use.

"Pest Control in the School Environment: Adopting Integrated Pest Management." (90 minutes, $225). Austin Frishman and Jeffrey Tucker, Video Development Services, PO Box 701067, Houston, TX 77270, (713) 681-9004.

This video is intended for school maintenance workers or pest control contractors wanting to learn about the integrated pest management approach and specific techniques. It depicts two pest control operators doing a walk-through of an elementary school and surrounding outdoor area to identify potential pest problems and ways to address them. At the end, an array of IPM-compatible pest control products and devices are displayed and discussed. The video is accompanied by a school IPM checklist.

Books

Getting Pesticides Out of Our Schools (30 pp., $5.00 ppd.), Northwest Coalition for Alternatives to Pesticides, PO Box 1393, Eugene, OR 97440; (503) 344-5044.

Pest Control in the School Environment: Adopting Integrated Pest Management (43 pp., free while supply lasts), U.S. Environmental Protection Agency Public Information Center (3404), 401 M Street SW, Washington, DC 20460.

Common Sense Pest Control (715 pp., $39.95), Bio-Integral Resources Center (BIRC), PO Box 7414, Berkeley, CA 97407; (510) 524-2587. This book includes a list of suppliers of least-toxic pest control products. Updated supplier lists are available from BIRC.

There are several new books and videos to watch for in the coming months. The Bio-Integral Resources Center will be publishing a "how-to" guide for school IPM practitioners, to be available in the spring of 1995. The National Education Association is publishing a book, *Healthy School Handbook*, also to be available in 1995. One chapter is written by Bill Forbes of Maryland and deals with reducing pesticide use at schools. The Center for Environmental Education, in conjunction with Scholastic Press will be publishing *Blueprint for a Green School* in early 1995. This book also contains a chapter on pesticide hazards, and reducing pesticide use in schools. Texas will be publishing materials and producing video modules to train school personnel and educate parents and the public about the state's new IPM law and how to implement IPM in schools and other public buildings. New York's Office of General Services will be publishing model IPM contract specifications. Call NCAP for assistance in locating these and other materials.

moting or mandating school pesticide use reduction. The city council in Burlington, Vermont passed an ordinance requiring that any turf or landscape use of pesticides at child care centers or K-12 schools must be preapproved by the Board of Health. Buffalo, New York's Common Council passed a resolution encouraging the city's schools to adopt IPM approaches. Texas, Michigan, and Florida have recently adopted laws or regulations mandating that their schools adopt IPM programs designed to reduce pesticide use. A Montana law encourages, but does not mandate, that districts adopt IPM programs. However, the state soon plans to mandate a new category of pesticide license for school pest control applicators. Licensees will have to attend IPM training courses and pass a test before being able to apply pesticides in schools. The Illinois legislature also recently directed that state's Public Health Department to issue guidelines for the management of structural pests in schools.

After school pesticide use reduction legislation failed last year in Washington state, the regional U.S. Environmental Protection Agency (EPA) helped convene a committee to consider ways to promote and fund school pesticide use reduction. The committee consisted of representatives from state agencies, public interest groups, the Extension Service, the school maintenance workers association, and more. The committee's recommendations urge training for school pesticide applicators, funding for an IPM information clearinghouse, classroom curriculum, parent education programs, and more. Similarly, a pesticide use reduction bill is stalled in New York's legislature, but in the meantime, the Board of Regents has undertaken an effort to improve environmental quality in New York schools. By early 1995, the Regents are expected to take action on recommendations that encourage use of least-toxic pesticides in schools, training of school personnel in IPM, posting and notification if pesticides are used, and more.

Louisiana recently passed legislation that encourages schools to use least-toxic pest control methods. Pennsylvania turned down legislation that would have mandated school IPM, posting and notification of pesticide applications. Proponents will try again. Arizona adopted a law in 1993 that requires public schools to provide advance notification of pesticide application to parents, students and employees.

Where to Turn for Financial, Material, Technical, and Political Support

Federal, state or local agencies may have funds, materials or services that can support aspects of school pesticide use reduction programs in your area. Ask about support for IPM contract assistance, worker training, building occupant education, student involvement efforts, or public education. EPA has distributed funds under its pollution prevention, urban IPM, indoor air quality, and other programs. Call your

regional EPA office to see what might be available. EPA-funded school IPM-related projects have included videos (Arizona and Texas), an urban IPM conference (Washington), pilot school programs (Washington and Oregon), and more. Environmental education grants are also available for teacher training.

The New York Department of Labor has provided funds to the New York Coalition for Alternatives to Pesticides for school IPM workshops around the state. New York Boards of Cooperative Educational Services (educational services districts) have also provided support for these workshops. The Maryland Department of Education has provided its own IPM training for school districts around the state under its indoor air quality programs. Upon request, agencies in your state may also be able to conduct or fund activities such as mailings of existing school IPM materials to schools in your area. The California Department of Pesticide Regulation recently paid to mail copies of an EPA school IPM publication (see Table 1) to all of the state's school districts.

Various agencies and groups have produced materials that may be helpful to school pesticide use reduction efforts everywhere. Besides EPA's school IPM publication, both the Illinois Department of Public Health and the Departments of Agriculture in Montana and Michigan have developed and disseminated written materials on school IPM. Texas is in the process of developing additional materials. The U.S. General Services Administration has developed IPM contract specifications and other very useful materials for facilities pest managers. The Massachusetts Office of Environmental Affairs developed a Request for Proposal for urban school IPM consultant services as part of a pilot project for the Boston schools. New York's Office of General Services has also developed an IPM contract specifications document that may assist school districts that plan to contract out for pest control services. Several school districts (e.g., Fulton, New York; Conroe, Texas; and others) have put together packets describing their own IPM programs.

Lack of material and technical support is simply no longer a barrier to finding alternative pest control methods or instituting a school IPM program. Tables 1 and 2 list some of the many low-cost technical and training resources that are available. Cooperative Extension or other federal or local government employees, when available, can often provide technical assistance at no charge (though they may need travel expenses if site visits are involved.)

A lack of outside funding also should not be an obstacle to getting a program started. Reducing pesticide use in schools does not cost a lot of money, and many successful school IPM programs have gotten underway with no funding beyond regular operating budgets. In fact, many schools report significant cost savings under IPM or pesticide use reduction programs, though this depends on the extent and cost of previous pest control practices. There may be some shifts in costs and responsibilities (e.g., from pest control contractors to custodial staff). Money for one-time or periodic training and pest prevention measures such as caulking, screening, concrete mowing strips, renovating and maintaining turf, or replacing damaged wooden structures can often be found in regular maintenance budgets, or phased in over time. For labor intensive alternatives such as weeding or spreading mulch, some schools are using creative solutions such as sheriff's work crews and student or parent volunteers. One high school turned over part of its grounds to students as a "living laboratory." With a small grant from EPA to get started, horticulture classes are designing and maintaining beds and native plantings without the use of herbicides. Districts that have experienced pesticide-related accidents and cleanups, or that have faced expensive lawsuits may realize that they can't afford *not* to find less hazardous ways to control pests.

Finally, though many technical resources are now available, broad-based political support and a written policy are still critical to ensuring a successful program and a long-term commitment by a school district to pesticide use reduction. Several districts have lost good programs when supportive maintenance staff have left. Various groups that may be good allies in school pesticide use reduction efforts are teachers and maintenance workers unions, PTAs, school districts' insurance carriers, League of Women Voters, Sierra Club, Citizen Action, or other local environmental organizations. The more of these groups that support your effort, the further you will likely be able to go toward achieving pesticide-free schools. Once policies are in place, education and continuing support of building occupants is also critical to program success.

School Pesticide Use Reduction: It's Coming Soon To a School Near You

Changes in school pesticide use practices are happening in large and small districts across the country because of the hard work and commitment of many parents, community groups, and school district staff. Schools across Texas and Michigan will soon be adopting IPM programs. If you live in these states, contact your school district to see what they are doing to comply with the new school IPM law. If you live in Montana, Washington, Illinois, New York, Louisiana or Florida, make sure that your district is aware of (and following) new or upcoming state recommendations.

Voluntary pesticide use reduction policies and practices are in place in school districts in: Eugene (OR); San Diego and Los Angeles (CA); North Thurston (WA); Ann Arbor and Grand Rapids (MI); Montgomery and Frederick County(s) (MD); Hinsdale (IL); Plumborough (PA); Athens (OH); Fulton (NY); Dade County (FL), and more. Pilot programs are underway in schools in Portland (OR), Onalaska (WA), Paradise Valley (AZ), and others. Programs are just beginning in many other areas.

Some of these schools are nearly pesticide-free, while others have accomplished significant use reductions but have a long way to go. All deserve recognition for the work they are doing, and encouragement to go further! Contact names and phone numbers for selected of these programs are listed in Table 3. If you live in one of these areas, call and lend your support to the school pesticide use reduction efforts already underway. If not, network with others in your state or region, learn from them, and use the inspiration to do something in your community. Reducing pesticide use in schools is a good idea whose time has come!

Table 2
Sources of Technical Support for School Pesticide Use Reduction Programs

Organization/Contact Person	Resources
Northwest Coalition for Alternatives to Pesticides, PO Box 1393, Eugene, OR 97440; (503) 344-5044	L,S,P
Bio-Integral Resources Center (BIRC), PO Box 7414, Berkeley, CA 94707; (510) 524-2567	L,S,P
National CoalitionAgainst the Misuse of Pesticides, 701 E Street SE #200, Washington, DC 20003; (202) 543-5450	L,S,P
National Pediculosis Association, (617) 449-6487. (Head lice and scabies treatment recommendations only)	
California	
Bio-Integral Resources Center (BIRC), PO Box 7414, Berkeley, CA 94707, (510) 524-2567	L,S,P
Pesticide Watch, 116 New Montgomery, Suite 530, San Francisco, CA 94105; (415) 543-2627	P
Californians Against Toxics, 860 1/2 11th, Arcata, CA 95521; (707) 822-8497	L,S,P
Idaho	
Ed Bechinski, Exension. IPM Coordinator, PSES, University of Idaho, Moscow, ID 83844; (208) 885-5972	L
Hugh Homan, Extension Entomologist, PSES, University of Idaho, Moscow, ID 83844; (208) 885-7542	S
Susan Bell, Extension Educator - Horticulture, Ada County Extension, 5880 Glenwood, Boise, ID 83714; (208) 377-2107	L,S
Nancy Taylor, Palouse Clearwater Environmental Institute, PO Box 8596, Moscow, ID 83843, (208) 882-1444	P (referrals only)
Montana	
Sherry Lajeunesse, Entomol. Research Lab, 324 Johnson Hall, MSU, Bozeman, MT 59717; (406) 994-5853	L,S
Barbra Mullin, Weed Specialist, Montana Dept. of Agriculture, PO Box 200201, Helena, MT 59620; (406) 444-2944	P (MT guidelines)
Bruce Jennings, Environmental Studies, Rankin Hall, University of Montana, Missoula, MT 59812; (406) 243-5209	P
Alternative Energy Resources Organization, 25 S. Ewing, Suite 214, Helena, MT 59601; (406) 443-7272	L
Cynthia Wilson, Chemical Injury Information Network, PO Box 301, White Sulphur Springs, MT 59645-0301; (406) 547-2255	L,S,P
Will Snodgrass, Missoulians for a Clean Environment/CIIN, PO Box 2885, Missoula, MT 59807; phone/fax (406) 543-7210	L,S,P
Oregon	
Northwest Coalition for Alternatives to Pesticides (NCAP), PO Box 1393, Eugene, OR 97440; (503) 344-5044	L,S,P
Tom Cook, OSU (503) 737-5449	L (turf only)
Washington	
Washington Toxics Coalition, 4516 University Way NE #6, Seattle, WA 98105, (206) 632-1545	L,S,P
Sharon Collman, WSU Cooperative Extension, Urban IPM Resource Center, Center for Urban Horticulture, University of WA GF-15, Seattle, WA 98195; (206) 543-8616	L,S,P
Susan Miller, IPM Specialist, King County Cooperative Extension, (same address as above); (206) 205-8616	L,S
Tonie Fitzgerald, Extension Agent, WSU Coop. Extension, N 222 Havana St., Spokane, WA 99202; (509) 533-2048	L
Other States	
New York Coalition for Alternatives to Pesticides, 33 Central Ave., Albany, NY 12210; (518) 426-8246	L,S,P
Jane Nogaki, New Jersey Environmental Federation, 223 Park Ave., Atco, NJ 08004, (609) 767-1110.	P
Agricultural Resources Center, 115 W. Main St., Carrboro, NC 27510; (919) 967-1886 or (919) 839-0159	L,S,P
Sharon Malhotra, Pennsylvania Sierra Club; (412) 325-4507	P
Mary Ross, Illinois Sierra Club; (708) 524-8534	P
Jill Viehweg, Safer Pest Control Project, 17 E. Monroe St., Suite 212, Chicago, IL 60603, (312) 641-5575.	P
Manasota '88, 5314 Bay State Rd., Palmetto, FL 34221; (813) 722-9413	P
Mary Lee Orr, Louisiana Environmental Action Network, PO Box 66323, Baton Rouge, LA 70893-6323; (504) 928-1315	L,S,P
Paula Henderson, Louisiana Citizen Action, 7434 Picardy, Suite D, Baton Rouge, LA 70809; (504) 769-8896	P
Mike Odom, Alabama Citizen Action,PO Box 4247, Montgomery, AL 36103; (205) 264-8969	L,S,P
Lori Glidewell, Citizen Action, Atlanta, GA; (404) 875-4403	P
James Scott, Public Citizen of Texas, 1800 Rio Grande, Austin, TX 78701; (512) 477-1155	S,P
Arizona Toxics Information, PO Box 1896, Bisbee, AZ 85603; (602) 432-5374	L,S,P
Gina Davis, Michigan Department of Agriculture, PO Box 30017, Lansing, MI 48909; (517) 373-1087	P (MI law)
Linn Haramis, Illinois Public Health Dept., Div. of Environ. Health, 525 W. Jefferson St., Springfield, IL 62761; (217) 782-5830	P (IL guidelines)
Benny Mathis, Director, Structural Pest Control Board, 9101 FM 1325, Suite 201, Austin, TX 78758; (512) 835-4066	P (TX law)
Geoffrey Brown, Env. Quality Institute, University of NC, 1 University Heights, Asheville, NC 28804-3299; (704) 251-6104	P (SC pilot program)
Dr. Stephen Frantz, NY Dept. of Health, Wadsworth Center, Empire State Plaza, Albany, NY 12201-0509; (518) 869-4520	S
Janet Knodel, IPM Building, New York Agricultural Extension Service, Geneva, NY 14456; (315) 787-2207	L,P
Rod Ferrentino, Urban IPM, Dept. of Ornamentals, Cornell Univ., 49-D Plant Science Bldg., Ithaca, NY 14853; (607) 255-5918	L,P
Robert Corrigan, Center for Urban IPM, Purdue University, W. Lafayette, IN 47907; (317) 494-4745	S
Cliff Sadof, Center for Urban IPM, Purdue University, W. Lafayette, IN 47907; (317) 494-4554	L
Fred Whitford, Purdue Pesticide Programs Office, Purdue University,1155 Lilly Hall, W. Lafayette, IN 47907; (317) 494-1284	S,P

NOTE: Some of these organization or individuals may make recommendations for conventional chemical treatments as well as alternative pest control techniques. Ask for information on non-chemical or least-toxic methods. NCAP also offers a list of structural and landscape Integrated Pest Management consultants-for-hire: Send a SASE to: NCAP, PO Box 1393, Eugene, OR 97440.

Resources Key:
- L: Offers information, consulting or referrals about **landscape** pest control
- S: Offers information, consulting or referrals about **structural** pest control
- P: Offers information, consulting or referrals about school pesticide use reduction **policies and strategies**

Table 3
Contacts for Selected School Pesticide Use Reduction Programs

State	City/School District	Organization/Individual	School District or Pest Control Contractor
Arizona	Paradise Valley*	Debbie McQueen (602) 582-0266	Michael Lindsay (contractor) (602) 939-7151
	Bisbee*	Michael Gregory (602) 432-5374	---
California	San Diego*	—	Ray Palmer (619) 627-7223
	Canyon Country*	Theresa Tye (805) 298-2526	Judy Heyn (805) 298-2280
	Los Angeles*	Joanie Clayburgh (415) 543-2627	Bill Hicks (213) 742-7246
	Fresno*	Cindy Hoopes (209) 225-6624	Lyn Peters (209) 441-6935
	Fremont*	—	Dean Nissen (510) 657-0693
	Placer County*	April Moore 878-2606(W)	—
	Laytonville*	Kathy Cloniger (707) 984-8263	---
	San Jose Unified*	Dan Mayfield (408) 971-6236	Terry Macias (408) 998-6200
	Lompoc	Brian Cole (805) 735-6222	—
	Univ. of California/Berkeley	---	Art Slater (510) 643-8079
Connecticut	Connecticut College	—	Jim Luce (203) 439-2259
Florida	Dade County*	Ed Benson (305) 592-2767	Stewart Samuels (305) 358-3501
	Sarasota County*	Mary Compton (813) 923-4671	---
Illinois	Hinsdale*	Diana Barrett (708) 323-7968	Sue Kamuda (708) 887-1350
	Wheaton*	Christine Maxwell (708) 462-9668	Gerry Thomasello (708) 682-2356
	Mokena*	Lori Fleischer (708) 479-9611	Dr. Roger Reardon (708) 479-3101
Indiana	Flora	Kathy Schultz (219) 967-3151	---
	South Bend (private school)	Mrs. Mittman (219) 232-6458	---
Louisiana	St. Tammany Parish*	Ellen Winchell (504) 674-0852	—
Maryland	Montgomery County	—	Bill Forbes (301) 840-8100; H:(301) 842-3482
	Frederick County	—	Laura Olsen (301) 694-1512
Massachusetts	Lexington*	Myla Kabat-Zinn (617) 861-8322	John Moynihan (617) 861-2567
	Harvard University	---	Dr. Gary Alpert (617) 495-1983
Michigan	Ann Arbor*	Mike Garfield (313) 761-3186	Phil McConnell (313) 994-2263
	Grand Rapids*	---	Nathan McCormick {616) 771-3010
	Allegan*	—	Jerry Skarbek (616) 673-5431
Minnesota	Lake Superior Dist. 381	Dawn Aune (218) 834-3909	—
Montana	Missoula	Will Snodgrass (406) 543-4357	Chuck Martin (406) 728-2400
New Jersey	Marlton/Evesham*	Jane Nogaki (609) 767-1110	Joseph Tobens or John Bigley (609) 983-1800
	Princeton*	Susie Waterman (609) 895-0705	---
	Cedar Grove*	Mara Silgailis (201) 239-4631	---
New York	Fulton	Jerry Hogan (315) 592-7580	Joe Hammond (315) 593-5514
	Locust Valley*	Peter Vasilas (516) 628-2296	Al Carreno (516) 674-6325
	Buffalo*	Meg Steffan (716) 833-5416	Tony Lupino (716) 885-9417
	Merrick-Bellmore	Marta Milchman (516) 379-4912	Mr. Dziedzic or Sandra Munz (516) 623-8900
	Setauket/Three Villages	Pam Botway (516) 474-5891	John Fleming (516) 474-7582
	Albany	NYCAP (518) 426-8246	Joe Urshel (518) 462-7324
North Carolina	Pitt County	Susan Meggs (919) 355-7335	John Staley (919) 756-2313
Ohio	Cleveland/University Heights	Laurel Hopwood (216) 371-9779	Chuck Kettler (contractor) (216) 771-0555
	Athens*	Heather Cantino (614) 594-3338	Larry Douglas (614) 797-4544
Oregon	Eugene*	NCAP (503) 344-5044	Doug Lemley (503) 687-3257
	Portland	NCAP (503) 344-5044	Pamela Brown (503) 249-2000 Ext. 4287
	Fernridge*	David Eisler (503) 935-7847	Bob Davis 935-2253/David Wilde (503) 935-4423
	Philomath	—	Jeff Mitchell (teacher) (503) 929-3211
	Lincoln County	Tom Gravan (503) 563-4510	---
Pennsylvania	Plumborough	Shirl Rings (412) 795-7978	Dick Hrivnak (412) 795-0103
	Ligonier*	Jan Milborn (412) 238-4968	Larry Glasgow (412) 238-6331
	Marple/Newton*	Chris Weidner (610) 353-2838	—
South Carolina	Columbia/Harbison W. Elem.*	Sandy Schoonover (803) 732-4694	Mr. Wallace Hubbard (803) 732-8011
Tennessee	Nashville*	Nancy McFadden (615) 386-9520	Tom Hatfield (615) 259-8742
Texas	Conroe	Rebeka Perrella (713) 363-4080	Earl Johnson (409) 441-9297
Vermont	Burlington/City Ord.	Doug Hoffer (802) 863-9094	—
Washington	Pullman	Dana Katz (509) 334-6633	---
	Onalaska	Susan Moorehead (360) 978-4205	Dr. Robert Kraig (360) 978-4111
	Lacey//N. Thurston	—	Matt Johns (360) 493-9126
	Seattle University	—	Cisco Morris (206) 296-6440

NOTE: Some of these school programs are well-established, while others are just getting underway. Those with written policies or IPM contract specifications are denoted by a *. Some of these schools have reduced their pesticide use by 50%, while others have achieved 90-95% or greater use reduction. Attitudes and approaches vary considerably. Some programs address only buildings, others address only grounds, and some address both. We have tried to include a representative sampling of the types of programs underway across the country. A number of these districts have written materials describing their programs and procedures. NCAP also has information on many of these policies and practices, as well as on programs in place or under development in other areas. If you don't see a program listed in your area, contact NCAP to see what other information we might have.