

Poison Parks: Teaching about Pesticide Use in Communities

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Abstract

This paper considers how educators can use the topic of pesticides to spark deep, creative thinking and discussion about many different facets of environmental education, while simultaneously educating students how to stay safe when coming into contact with pesticides. In addition, integrating the arts as a learning device can encourage compelling engagement by students with environmental issues (e.g., pesticide use). In the arts, creativity and spontaneity is evoked, which can lead to unforeseen conclusions and possible solutions. This paper offers an example of a pesticide issues curriculum created by a graduate-level teacher/student for use in the preK-12 classroom or community education setting. The lessons indicate how the arts might be used to encourage a growth in awareness in young students, without making them and their parents “afraid” of nature. Such learning might also result not only in more awareness in kids, parents, and teachers, but in local officials taking new actions.

Keywords: Pesticide, arts integration, pesticide education, poison parks, pesticide project, environmental education, K-8 class activity, and pesticide lesson plans.

Introduction

In a neighborhood park in a mid-sized city, children are regularly brought to play on swings, make up games on the wide lawns, gather in clusters, giggle, roll down hills, and run and fall and get up and run some more. They get exercise and connect with other kids they might not already know and their play radiates sheer joy. Parents supervising at a little distance assume that they are safe. But what else are they getting while they play on beautiful green lawns, and breathe in fresh air? They might be bringing home on their bodies and clothes pesticide poisons used to keep these spaces so green. The solution is not to avoid such joyous play and keep children inside at their screens, not to avoid nature, but to understand and influence how pesticides are used. We all need to be educated—children, teachers, parents, and city officials. The American Association of Poison Control (2014) reports that pesticides were the eighth most common substance reported to poison control centers and about fifty percent of reported poison exposures involved children. Many pesticides used in parks, community centers, outdoor spaces, gardens, and homes can be harmful to those who come into contact with them, and children are particularly at risk. Often the real effects of common pesticides are unknown to the departments and officials who use them.

This paper considers how educators can use the topic of pesticides to spark deep, creative thinking and discussion about many different facets of environmental education, while simultaneously educating students how to stay safe when coming into contact with pesticides. In addition, integrating the arts as a learning device can encourage compelling engagement by students with environmental issues (e.g., pesticide use). In the arts, creativity and spontaneity is evoked, which can lead to unforeseen conclusions and possible solutions. This paper offers an example of a pesticide issues curriculum created by a graduate-level teacher/student for use in the preK-12 classroom or community education setting.

The lessons indicate how the arts might be used to encourage a growth in awareness in young students, without making them and their parents “afraid” of nature. Such learning might also result not only in more awareness in kids, parents, and teachers, but in local officials taking new actions.

Pesticide Use

The U.S. Environmental Protection Agency (EPA, 2015) defines pesticides as “any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest” (p.1). This includes herbicides, insecticides, fungicides, and rodenticides (Department of Health and Human Services, 2007). The United States makes up over 30% of worldwide pesticide use (Grube et al., 2011). In 1988 The United States spent \$7,275 million dollars on pesticides, in 1993 \$8,832 million dollars were spent, by 1998 U.S. pesticide spending went up to \$11,416 million dollars, and in 2007 pesticide spending was up to \$12,454 million dollars (Grube et al., 2011, p.22, table 5.1). Even though pesticides play a crucial role in agriculture and disease control pesticides are not just found on farms. Some research shows that the amount of pesticides used in agriculture is less per acre than in homes and on home lawns and gardens (Grube et al., 2004).

Internationally, a number of countries are conducting government programs to identify cases of poisoning by pesticides. In the United States, the *Occupational Safety and Health Administration*ⁱ (OSHA) has been operating a program called the *Sentinel Event Notification System for Occupational Risks* since 1988. In seven countries (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama) since 1994, the *Pan American Health Organization*ⁱⁱ has looked at occupational and environmental aspects of exposure to pesticides in Central America. Since 1998, the International Program on Chemical Safety jointly established in seven countries in Asia - India, Sri Lanka, Thailand, Myanmar, Nepal, Bangladesh and Indonesia- has operated programs supervising pesticide applications. The Republic of South Africa, since 1987, has been running a program to carry out the pesticide poisoning monitoring system.ⁱⁱⁱ Through those established surveillance systems, epidemiological studies on the scale of pesticide poisoning, incidence and the pattern of addiction have been actively reported. In addition, studies on pesticide poisoning of individual pesticides, especially with children and adolescents, farmers with specific jobs, pesticide sellers, and the like are being carried out. Moreover, case reports such as congenital anomalies in children exposed to those pesticides are collected and may serve as a catalyst for further research. The surveillance system not only makes an important contribution to the ecological studies on pesticide poisoning, but also provides an important basis for preventive action at the institutional and educational levels.^{iv}

One of the major causes of pesticide poisoning is the lack of understanding of how pesticide poisoning occurs and the lack of care in pesticide handling, making it crucial to strengthen education and publicity in schools and local communities. The curriculum offered here is one possibility.

Pesticide Risks

Most pesticides are intended to kill or limit living things, they can become dangerous for not only humans, but also animals, and the environment. Beitz and de Castro found (2010) that “heightened attention and a growing body of research have resulted in the availability of data demonstrating the acute toxic effects of many commonly used pesticides” (p. 349-350). Those effects have been found to include nausea, vomiting, headaches, changes in heart rate, bronchospasm, convulsions, cancer, dysfunction of the immune, reproductive, and endocrine systems, neurodevelopment impairment, even coma and death (Alarcon et al., 2005; Beitz et al., 2010; Goldmann, 2004; Lucas et al., 2009). It is especially difficult to determine the health risks associated with pesticide exposure because there can be a lag time between when someone is exposed to pesticides and the discovery of an illness. Meanwhile pesticide poisoning studies has been conducted primarily on adults, so we are lacking data on how pesticides effect children. Pesticide exposure symptoms are also often misdiagnosed as other illnesses. Lucas and Allen (2009) stated that more research is needed on the consequences of pesticides when they are compounded by being used in areas where other pesticides are already in use, as is common.

Children are particularly at risk for pesticide exposure (Beitz et al., 2010; Roberts et al., 2012; Goldmann, 2004; Lucas et al., 2009; Tulve et al., 2008). Children are more susceptible to pesticide exposure because they are close to the ground, their skin is more permeable, and they put their hands and found objects in their mouths. They are also more vulnerable to the health risks associated with pesticides because their central nervous system and other important organs are still in the process of developing. It has been found that increasing education about pesticides helps to prevent exposure (Centers for Disease Control Prevention, 2007; Langley, 2012; Sam et al., 2007).

Education about the dangers of pesticides and how to improve safety must be an endless effort between international organizations, governments, communities, educators, and parents. The following questions may be useful to consider:

- How can we make pesticide education a launching pad for thinking and discussion of many aspects of environmental education?
- How can educators teach children about danger and safety while avoiding eco-phobia?
- How can teachers find out what local pesticide threats affect their students?
- How can teachers create possibilities for simple research and investigation by students, thus connecting them with the communities they live in?
- How can students get outside the classroom, and also see that their knowledge can make a difference?

Pesticide Education

Many educators are making various attempts to provide better environmental education to K-8 graders. In considering environmental education today in grade K-8, Young Imm Knag Song (2008) has observed “three major problems with much of today’s environmental education: first, an attitude of emotional detachment from nature; second, an emphasis on a reactive rather than a preventive approach; and third, the limited scope and perspective of environmental education in general. Each of these severely detracts from the potential positive impact of environmental education and merits remediation” (p. 13). As a possible solution to these three major problems, teachers and community educators can leverage various art forms and integrate them into the curriculum. This can be done in thought-provoking ways that will help students gain a deeper understanding about environmental issues, such as the effects of pesticide use.

Scholars and educators have explored how the arts help foster intellectual development. This is in contrast to the current test-based focus on reading and math, which excludes many other subjects and is not in the best interest of children’s educational well-being with regards to their cognition and engagement (Eisner, 1985; Gardner, 1973; Polanyi, 1958). Charles Fowler (1996) highlights that “the arts provide a more comprehensive and insightful education because they invite students to explore the emotional, intuitive, and irrational aspects of life that science is hard pressed to explain” (p. 27). Integrating arts into schools can transform teaching by helping education be more applicable, inspiring, and enriching for students (Song, 2012). In addition, art gives an experiential dimension to environmental education. Incorporating art in environmental education helps to build appreciation and awareness, and encourages a sense of shared responsibility for nature that students carry throughout their lives. Environmental educators have developed exciting and innovative approaches that unite these fields, and together, they aim to foster powerful cognitive, personal, and moral development (Blandy, Cogdon, & Krug, 1998; Gablik, 1991, 1995; Krug, 2000; Lankford, 1997; Neperud, 1997; Song 2008, Stankiewicz, 1997). These kinds of educational approaches can encourage children to learn about pesticide issues at the local level, and become active in bringing about changes as well as becoming aware of the national and global scope of the issues involved.

Research Project

Charlotte Huffman, an elementary school art teacher and graduate student at Lesley University in Cambridge, Massachusetts, USA, conducted research for a final project in a course called *Environmental Arts and Education*. This research project is an example of how this subject can be useful in generating students’ research projects that would raise consciousness and create change in how pesticides are used.

Let Us Grow: An Artistic Response to Pesticide Use in Southwest Corridor Park

Charlotte Huffman lives in Jamaica Plain, Massachusetts and spends a lot of her time in the parks near where she lives. When she started researching environmental issues in her neighborhood she found several articles about pesticide use in Southwest Corridor Park that intrigued her. She often uses Southwest Corridor Park for its open green space, bike, and walking paths. This paper outlines the research she conducted on the history of the park, the pesticides used in the park, the effects those pesticides can have on surrounding communities, and her artistic response to the issue.

Boston's Southwest Corridor Park



Figure 1: Map of Emerald Necklace (Emerald Necklace Conservancy, www.emeraldnecklace.org)

Southwest Corridor Park (SWCP) is a 4.7-mile long, 52-acre, park that connects the Back Bay neighborhood of Boston to Forrest Hills (Massachusetts Department of Conservation and Recreation, 2015). It links the surrounding neighborhoods with green open space, tot lot areas, spray pools, basketball courts, tennis courts, street hockey rinks, dog parks, community gardens, amphitheatres, a skate park, and bike and walking paths (Massachusetts Department of Conservation and Recreation, 2015). The park runs alongside and above the orange line of the MBTA and serves approximately 130,000 local residents and commuters (Southwest Corridor Park Conservancy, 2015).

History of Southwest Corridor Park

The Southwest Corridor Park was almost a 12-lane stretch of Interstate-95. During the 1950's and through the 1960's Boston designed a plan for I-95 to run along the railroad tracks between Boston and Rte.128. People who lived in the affected communities; Roxbury, the South End, Jamaica Plain, Back Bay, and Cambridge worked for years through peaceful demonstrations, marches, and grass-roots lobbying to try and save their neighborhoods (Storey, 2013). In 1972 the fight was won by community members and the interstate and highway funds were used to create the orange line of the MBTA and the Southwest Corridor Park that runs above it instead (Massachusetts Department of Conservation and Recreation, 2015). Since then SWCP has been celebrated by local residents as a sign of the good that can come from communities working together (Spontaneous Celebrations, 2015).

Pesticide Use in SWCP

During an exceptionally wet spring in 2003 community residents noticed that their pets were becoming ill after playing in or drinking from puddles in the park. Pet owners connected these illnesses to pesticide use and wrote letters to local newspapers and to the Neighborhood Pesticide Action Committee (Connors, 2009). Those letters led to the NPAC doing an investigation and writing a report on the status of pesticide use in Southwest Corridor Park and the effects on the surrounding communities. It also prompted local communities to take action and ask the state to stop using pesticides in SWCP (Cronin, 2006).

Types and Extent of Pesticide Use

The DCR, the MBTA, and the Suffolk County Mosquito Control have all used a variety of pesticides in the Southwest Corridor Park in the last 25 years (Connors, 2009). In urban areas where residential, commercial, and public properties all exist in close proximity to each other the risk from pesticides used by each property is exponential. Southwest Corridor Park is an example of an area that is chemically overtaxed, as both the DCR and the MBTA use pesticides, but do not coordinate with each other. The five pesticides used routinely on the Southwest Corridor Park until the spring of 2006 are capable of causing serious health conditions.

“Two pesticides that were used on the park through 2005 are classified by the EPA as either “highly” or “very” toxic; two others contain ingredients that are known human carcinogens; and another is linked to statistically significant increases in birth defects and neurodevelopment disorders” (Connors, 2009). Additionally there are four other pesticides that were regularly applied to the MBTA railways and other city owned lots connected to the park to control mosquitoes and vegetation.

Effects of Pesticide Use

The DCR is adamant that pesticide use is necessary to maintain the park, in 2007 DCR spokesperson Vanessa Gulati stated in an interview with The Boston Globe “the only alternative would be to burn the grass”(Cronin, 2007). The problem with pesticides is that they are poisons, and often they can reach far beyond their intended use. Pesticides do not necessarily dissipate after application. Most of them retain their strength long after they are applied. Pesticides have the tendency to vaporize and become airborne becoming an air quality risk or leach through the soil creating toxic puddles or getting into the water supply. Pesticides can also be tracked into homes or schools. Once they enter an indoor environment they can remain in a home for up to a year exposing the occupants to dangerous poisons as long as they remain (Connors, 2009).

The four most common but serious health effects associated with pesticide exposure are cancer, neurological disorders, asthma, and disruption of hormones and reproductive problems (Toxics Action Center, 2015). People who live in the communities surrounding Southwest Corridor Park have an asthma hospitalization rate that is 20% higher than the average Boston rate, which itself is the highest rate in the state (Connors, 2009). In 2006, after the community protests, the DCR agreed to stop using four out of the five pesticides it had been regularly using in SWCP (Cronin, 2006). When the DCR announced this policy shift it made only a one-year commitment, and the DCR has not since made public its pesticide practices. “There is no system in place that allows a citizen of Boston to know on any given day what pesticide is being used and where” (Connors, 2009, p. 13).

Art Project Response

In response to the research Huffman conducted on Southwest Corridor Park and the pesticides used there she created a public art piece. Public art can raise awareness of issues addressed by the artist and create community conversations while adding cultural value to the public space where it is installed. She used a terrarium case, a large terra cotta plant saucer, left over potting soil, and weeds from her front yard to create a living protected tiny field of weeds. Huffman then painted found tiles with letters to read “Let Us Grow.” Huffman installed the piece temporarily on a grassy area of SWCP next to the skate park, a public garden, and a tot lot. The piece was installed in a position the artist felt would pique the greatest curiosity in park visitors, with the hope that it would inspire conversations and interest in pesticide use in the park. Huffman feels passionately that green spaces should be places where humans collaborate with the environment in a healthy, sustainable way. No one should have to worry that their local park could make them or their children sick. Her piece asks the organizations who run the park to consider how letting the weeds grow may also help the many local residents and children grow as well.



Figure 2. Design sketch of Let's Us Grow



Figure 3. Let's Us Grow in SWCP with titles

Lesson Plans

The next section describes lesson plans which K-8 teachers and community educators can easily adopt. Charles Fowler (1996) emphasizes, when students have opportunities to participate in a learning process using various arts forms, they become more engaged with the task at hand and discover new ideas “from the inside out rather than from the outside in” (p. 39). These integrated lesson plans with various arts forms will give students the chance to engage in critical thinking, and to become more motivated to learn about pesticide use.

Write, Rhyme, and Rap: Wash your Hands

The most important lesson we can give our youngest students to keep them safe is how and when to wash their hands. This lesson uses glow powder and a black light to show students how we can have germs and pesticides on our hands without seeing them, and to help us check that our hand washing is thorough. This lesson could be connected to a health unit about germs or used on its own to give students the skills they need to reduce their pesticide exposure.

Topics: Music integration, language arts, pesticide safety practices, and hand washing
Learning Objectives: Students will be able to correctly wash their hands, fruits, and vegetables and identify why they need to be washed. Students will create rhymes to demonstrate their knowledge and perform them while washing their hands.
Grade: K-6
Materials: Zinc sulfide powder, paper towels, soap, fruit and vegetables (real or play), mini black light, hand washing posters, pencils and/or crayons, white paper, writing paper, music resources, rap/poetry resources, assorted hand drums
Hook: Students will be excited to learn when they enter the classroom to find hand drums around the room and hear a beat playing. Engage students by asking them to play along and join the beat using the drums.
Activity: -Ask students why they think we need to wash our hands and food. -Introduce pesticides and how they are used to help farmers grow food without bugs, but that they can hurt humans if we don't wash them off. We can also get them on our hands when we play outside in parks. Pesticides can be very bad for our health. -Introduce rhyming poetry and rap, ask students to create rhymes that go over a beat that share what they have learned about pesticide safety. When performed the rhymes need to last longer than 15 seconds. -Break students into pairs, ask 1 student from each pair to come up and pick up the food they and their partner would most like to eat, then put it back, and go shake hands with their partner -Tell students that we cannot see pesticides but they can still be there -Use the black light to show students the zinc sulfide powder on a piece of the food -Use the black light to show the zinc sulfide on student's hands, even those who did not pick up the food
Practice/Performance: -Teacher demonstrates thorough hand and food washing technique while performing an original pesticide safety rap and demonstrates the absence of zinc sulfide when everything is washed properly. -Students practice washing their hands and food while performing their pesticide rhymes.
Create: -Students create their own hand or food-washing posters to take home and share with their families

A Food Chain Accordion Book

The food chain is an important part of environmental science in elementary schools, it is also a great opportunity to introduce students to how pesticides can effect more than the pests they are designed to deter. Seeing how pesticides can affect animals all the way up the food chain can spark discussions about cause and effect and how we can try to take care of the environment in our own schools and homes.

Topics: Food chain, pesticide education, hand book making, accordion book
Learning Objectives: Students will be able to identify how pesticides enter the food chain, and how far up the food chain they can be found. They will express this knowledge through creation of an accordion book.
Grade: 2-8
Materials: small photocopied pictures of animals in the food chain and small photocopied pesticide poison symbols, art supplies and paper, pesticide education video resources, marbles and cardboard boxes
Hook: Students will be excited to learn when they see paint, marbles, and cardboard boxes ready at their tables. Students will place a piece of paper in the cardboard box then add two paint covered marbles and move the box to create beautiful paint designs for the cover of their books.
Activity: -Introduce videos and connect pesticide education to the food chain -Discuss with students how pesticides get into the food chain and how high up in the food chain pesticides can be found
Create: -Students create accordion books to hold their new knowledge -Students cut out pictures of animals and plants in the food chain and collage them onto the pages of their book -Students cut out and add pesticide poison symbols where they can be found in the food chain -Students turn their collage into a landscape, adding details of the environment these animals live in
Reflect: -Students share their work in small groups -Teacher leads a class discussion about cause and effect -Teacher asks students to brainstorm and class creates a list of things that students can do to have a positive effect on the environment

The Water Cycle Paper Quilt

The water cycle is a staple of elementary school science and provides us with a great opportunity to introduce students to how pesticides enter the water cycle. Adding the information about pesticides to these standard lessons can create room in the curriculum to discuss the ways humans are effecting the environment and what students can do to help preserve our water and our world.

Topics: Water cycle, pesticide education, paper quilt
Learning Objectives: Students will be able to identify what runoff is, what part it plays in the water cycle, and how pesticides can enter the water cycle. Students will convey this knowledge through creation of a paper quilt.
Grade: 4-8
Materials: -water cycle and pesticide education resources, paper, art materials, salt, rubbing alcohol, Illustrated examples of the water cycle, and small photocopied pesticide poison symbols, paper quilting materials.
Hook: Students will be excited to learn when they see watercolor paper, salt, and rubbing alcohol at their tables. Students will experiment with what happens when they use watercolors on dry paper, wet paper, and what happens to the paint when you add a sprinkling of salt or rubbing alcohol. After these papers dry they can be cut up and used to create beautiful borders around the squares of the paper quilt.
Activity: -Introduce the water cycle and pesticide education -Discusses what runoff is, where runoff goes, and how pesticides can enter the water cycle
Create: -Students illustrate the water cycle on a square piece of paper creating their own landscape that includes a farm -Students cut out and add pesticide poison symbols where they can be found in the water cycle -Students use their watercolor papers to create borders around their square -The class joins their squares together to create a paper quilt
Reflect: -Students share their work in small groups -Teacher leads a class discussion about cause and effect -Teacher asks students to brainstorm and class creates a list of things that students can do to have a positive effect on the environment

Pesticide Signs: A Classroom Mural

Use this lesson to teach students what to do when they come into contact with pesticide signs. Students will reinforce their new knowledge by using it to create a classroom mural that will help educate other students.

Topics: Pesticide safety, mural creation, local plants and animals
Learning Objectives: Students will be able to identify pesticide warning signs and the three steps they can take to stay safe, local plants and animals and how they are affected by pesticides. Students will demonstrate their knowledge when they create a classroom mural.
Grade: 1-5
Materials: A variety of pesticide warning signs, mural paper, art supplies, paper, local plant and animal guides
Hook: Students will be excited to learn when they get to start class with a game of charades. Students will choose an image of a small every day sign (like a stop sign, no parking sign, moose crossing, or warning falling rocks) out of a hat, then act it out for the class to guess.
Activity: -Introduce students to pesticides, how, why, and where they are commonly used -Introduce students to each pesticide sign and what they mean -Explain that pesticides are invisible to us so we have to rely on signs to know where they are and that pesticides can make us sick so if we see these signs there are three things we can do to stay safe: Stay away from where the signs are, tell a grown up that you saw the signs close by, and wash your hands. -Lead the class outside in the school community to create a list of the kinds of plants and animals you can see, use your local plant and animal guides to check exactly what kind of plants and animals you are finding.
Create: -Students create a collaborative mural, each student works on adding a specific local plant, animal, or location (like a park or farm) to the landscape. Students add pesticide warning signs where there are areas that might use pesticides.
Reflect: -Students post their mural in the school and invite other classes and community members to visit. Students teach visitors about the local ecosystem and pesticide safety.

The '*Pesticide Safety Elementary Curriculum*' by the Fred Hutchinson Research Center (2003) was a useful resource in developing these lesson plans.

Conclusion

In the light of widespread pesticide use in public parks and the danger to children, and using some curriculum suggestions in this article, researchers, curriculum specialists and teachers might further explore the subject using the following questions: How can we make pesticide education a launch pad for considering other aspects of environmental education? How can educators teach children about danger and safety while avoiding eco-phobia? How can teachers find out what local pesticide threats affect their students? How can teachers create possibilities for simple research and investigation by students, thus connecting them with the communities they live in? How can students get outside the classroom, and also experience that their knowledge can make a difference? Educators will of course revise these lessons plans to fit their students, and the lessons can also incorporate science, language arts, social studies, arts, etc. The arts lend themselves well to this interdisciplinary approach, as they offer different "languages" in which to speak about multiple subjects and call for a particular kind of critical thinking process. The arts encourage students to think beyond basic rote skills and instead to ask questions and synthesize information from different disciplines, methods, and perspectives. When students engage in critical thinking, they are able to understand and consider various perspectives, which may ultimately lead them to draw richer conclusions (Donaldson, 1996).

Through these activities, students not only learn about the need to be cautious about pesticides, but also about the power of reflecting on the value of nature, human interdependencies, and improving ecological conditions. Furthermore, these activities can promote a higher level of awareness, understanding, and insight not only for students, but also for the broader community.

Resources Related to Pesticide Use

To find out about pesticide laws, use, and resources in your community:

- The National Pesticide Information Center: to find information about local pesticide use and resources in your community visit <http://npic.orst.edu/mlr.html>
- The Environmental Protection Agency (EPA): for local environmental health resources visit <https://www.epa.gov/communityhealth>

Resources for teachers:

- Reducing Pesticide Exposures as Schools: this guide created by the Center for Disease Control and Prevention provides information on how educators and school administrators can create safe school environments by using integrated pest management. Visit <http://tinyurl.com/pesticidesafeschool>
- Penn State pesticide education lesson plans: This collection of lesson plans and activities center around pesticide education for all levels. Visit <http://tinyurl.com/PENNpesticides>
- Environmental Protection Agency teacher resources: this large collection of lesson plans, teacher guides, and resources for all age groups focus on environmental science and issues that affect our air, water, and health. Visit <http://tinyurl.com/epalessonplans>
- Pesticide Safety Elementary Curriculum: This curriculum guide for elementary students who live near agricultural areas provides teachers with everything they need to teach a unit on pesticide safety. Visit <http://tinyurl.com/pesticideselementary>

Pesticide safety:

- American Association of Poison Control Centers: to find the poison control center closest to you visit www.aapcc.org
- Citizen's Guide to Pest Control and Pesticide Safety: Created by the EPA this is a comprehensive guide to safety and pesticides. Visit <http://tinyurl.com/citizenspesticideguide>
- The Community Guide to Recognizing and Reporting Pesticide Problems: created by the California Department of Pesticide Regulation this downloadable guide provides easy to follow instructions for responding to pesticide problems. Visit <http://tinyurl.com/recognizeandreport>

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