

Abandoned Pesticides Project L'Anguille Watershed East AR – The Delta

Suzanne Smith Hirrel



UNIVERSITY OF ARKANSAS
DIVISION OF AGRICULTURE

Cooperative Extension Service

L'Anguille Watershed East AR – The Delta



Funding



- \$200,000 nonpoint source pollution grant from the Arkansas Natural Resource Commission (319 EPA)
- \$200,000 match from the Arkansas Abandoned Pesticide Trust Fund (administered by the State Plant Board)
 - Generated by fees on pesticide registrations

Goals

- **Educate producers** of the dangers and risks of old abandoned pesticides and of the opportunity to participate in Agricultural Pesticide Collection Events.
- **Partner** with the State Plant Board (SPB) and the Abandoned Agricultural Pesticide Board to facilitate the collection of old/abandoned pesticides.



Goals

- **Define a protocol for self-assessments** to ensure privacy of producer, but provide a list of types, quantities, and packaging characteristics of pesticides - to insure that pesticides posing the greatest risk are disposed of.
- **Determine cost projection** for collection and disposal of surveyed pesticides utilizing the *Abandoned Agricultural Pesticide Disposal Trust Fund*.
- **Measure the effectiveness** of the educational program based on pounds of pesticides collected and producer/landowner participation.



Staffing & Local Support

- A multi-county agent coordinator – working in 6 counties
 - County agents – 6 counties
 - Extension Specialists
-
- Local planning committees – Co. Judge, Emergency Services, Farm Bureau, Co. Agents, others (CD, NRCS, farmers)




Educational Materials Developed

- Posters
- Letters
- Displays
- Flyers
- Handouts
- News releases
- Radio scripts
- PowerPoints
- Web site
- Incorporated into PAT
- News articles
- Info in newsletters

Educational Materials

L'ANGUILLE WATERSHED

OLD AND ABANDONED PESTICIDE COLLECTION AND DISPOSAL PROJECT



Our goal is to help farmers and landowners in the six counties of the L'Anquille watershed (Craighead, Cross, Lee, Poinsett, St. Francis, Woodruff) with the disposal of unwanted and unusable agricultural pesticides in a safe, legal way that is also economical and convenient. This is a non-regulatory service that poses no consequences to participants.

THE LONGER A WASTE PESTICIDE IS KEPT, THE MORE LIKELY A:

- Container will **deteriorate** and **leak**
- Product label will become **destroyed**
- An **accidental exposure** to chemical will occur
- Location of stored pesticide will be **forgotten**

These chemicals pose a threat to surface and groundwater in the event of **fires, floods, earthquakes** and **landslides**.

This program is **free** to all participants. There will be **no penalties** and **strict confidentiality** of participants is maintained.

This program is funded by Arkansas pesticide registration fees.

For more information contact:

Billie Majors
Multi-County Extension Agent-Pesticide Disposal Coordinator
870-261-1730
bmajors@uaex.edu
Visit our website at uaex.edu

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University of Arkansas Cooperative Extension Service, Arkansas Natural Resources Commission - 319 Grant, and the Abandoned Pesticide Advisory Board

L'ANGUILLE WATERSHED

OLD AND ABANDONED PESTICIDE COLLECTION AND DISPOSAL PROJECT

What is the Project Goal?
To assist farmers and landowners in the L'Anquille Watershed with the safe collection and lawful disposal of unwanted, outdated, or unwanted pesticides.

Who Can Participate?
Agricultural producers and landowners can participate. Participation in the waste pesticide collection program is strictly voluntary. Those who plan to bring waste pesticides in for disposal are asked to fill out a pre-registration form (strict confidentiality of participants is maintained).

What is NOT Accepted?
The program is NOT open to COMMERCIAL pesticide applicators or pesticides. PLEASE.

What is the Cost?
It's FREE and CONFIDENTIAL. The registration fees.

Why Should You Pre-register?
Submitting an inventory form is critical in helping the organization of the event by knowing amounts and kinds of waste pesticides being brought, advance resources, storage and transportation will be available.

Inventory Survey Forms are available from your County Extension Office, County Farm Bureau office, farm supply stores, co-op, or gift.

For further information contact:

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870-261-1730
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What is Accepted?
Both known and unknown chemicals will be accepted, including outdated, discontinued, or unwanted agricultural pesticides (insecticides, herbicides, and fungicides). Of particular interest are older pesticides known to be toxic such as Arsenicals, DDT, Dieldrin, Heptachlor, Dieldrin, Lindane, Toxaphene, and 2,4,5-T.

What is NOT Accepted?
Products other than pesticides will not be accepted at the collection site. Specific materials that will not be accepted include, but are not limited to: explosives or ordinance materials, petroleum products, paints, medical wastes, and radioactive materials.

What Containers are Accepted?
Farm chemicals in all forms and sizes of containers (in drums, wooden casks, bottles, plastic containers) will be accepted. Chemicals in deteriorated or leaking packaging may need to be over packed - please indicate condition of the container on the inventory form. In some cases on-farm pickup by the hazardous waste contractor may be necessary.

Where Will the Waste Go?
The old pesticides are collected and disposed of through the Arkansas Abandoned Agricultural Pesticide Disposal Program. The pesticides are collected by licensed hazardous waste professionals and disposed of in licensed hazardous waste incinerators.


Where Are the Collections?
Collections will be scheduled in the six counties of the L'Anquille Watershed (Craighead, Cross, Lee, St. Francis, Poinsett, and Woodruff).

What Can You Do to Help?
Fill out inventory survey. Mail form to your local Farm Bureau office, and then mark the collection day on your calendar as a reminder. Discuss the Pesticide Collection Program with neighboring farmers and encourage their participation. Help spread the message about the program and its value through friends, farm and community organizations, and agricultural associations.

RELAX, IT'S EASY.

THIS PROGRAM IS **FREE** TO ALL PARTICIPANTS.


THERE WILL BE NO PENALTIES AND STRICT CONFIDENTIALITY OF PARTICIPANTS IS MAINTAINED.



This program is funded by Arkansas pesticide registration fees.

For more information contact:

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Program Outreach

- Mailing/phone/personal communication
- Presentations

■ Dec 06	4 presentations	82 producers
■ Jan 07	7	373
■ Feb 07	12	394
■ Mar/Apr	<u>4</u>	<u>64</u>
Total	27	913

Educational Materials


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Agriculture and Natural Resources
 ESA0922

Pesticide Storage, Safety and Disposal

Suzanne Smith Hirrel
 Extension Specialist/
 Associate Professor -
 Environmental
 Management

Billie Majors
 County Extension Agent -
 4-H

No matter how well agricultural producers calculate their pesticide needs, there is always the possibility they will end up with chemicals that cannot be used. The most common reasons for these unusable pesticides are lost labels, registration cancellation and exposure to extreme cold or heat.

While it is not illegal to possess canceled or unusable pesticides if properly stored, it is often illegal to use canceled pesticides. Caution should be taken with these chemicals, as users may be subject to fines and/or cleanup costs if containers leak and contaminate soil, water or other resources.

The Arkansas State Plant Board, with support from the Arkansas Natural Resource Commission, the University of Arkansas Division of Agriculture Cooperative Extension Service and the Arkansas Farm Bureau, have piloted a program to help Arkansas farmers dispose of unwanted pesticides at no cost. In 2006 and 2007, the Abandoned Pesticide Trust Fund funded collection events in nine counties. These events collected and

disposed of 231,712 pounds of unwanted and unusable pesticides.

This program is open to all agricultural producers and landowners free of charge. Commercial pesticide applicators and dealers do not qualify for the program.

Funding for this program comes from pesticide registration fees paid by chemical manufacturers. However, funding is limited, so the program has not yet been offered statewide. Counties with large agricultural production are being targeted first for collection events.

Waste pesticides are collected by licensed hazardous waste professionals and disposed of in licensed hazardous waste incinerators or landfills.

Guidelines for Safely Storing and Disposing of Waste Pesticides

Take an inventory of all waste pesticides. A sample inventory form is in this fact sheet or can be obtained from www.arknet.edu or from your

Accepted Materials	Materials Not Accepted
Pesticides will be accepted in any containers. <ul style="list-style-type: none"> • Pesticide • Pesticide mixes • Unknown pesticides • Metal pesticide containers 	Any non-pesticide material such as: <ul style="list-style-type: none"> • Explosive or ordnance materials • Radioactive materials • Household chemicals • Petroleum products • Medical wastes • Fertilizers • Solvents • Parts


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 University of Arkansas, United States Department of Agriculture, and County Governments Cooperating

Pesticide Collection

Tips for Safely Transporting Agricultural Pesticides

- Handle pesticides with care and always wear rubber gloves. Avoid breathing, touching, or ingesting pesticides. Always wash hands after handling pesticides or containers. Examine all pesticide containers before handling; be especially cautious when breaks, rips or leaks are apparent.
- Move pesticides in a safe container. Transporting pesticides in their original container is preferred, but rusty metal, brittle plastic and aged paper containers may be unsafe. If a container is unreliable, place it inside a larger container: a rigid plastic or metal container with a lid is recommended for liquids; a sealed plastic bag or cardboard box is adequate for solids. If a pesticide is not in its original container and you have its label, bring the label with to help identify it.
- If there are pesticides in leaking and/or deteriorating packaging that is not safe to transport in the back of a truck, please make note of this on the "Inventory Form." The hazardous waste disposal company that is collecting and disposing of the pesticides can conduct on-farm collections where necessary.
- Secure the load during the trip to the disposal site: Prevent containers from bumping against other containers and breaking, overturning and spilling during transport. Boxes with cardboard inserts are ideal for separating containers. Load containers into the bed of a truck or trunk of a car. Do not transport pesticides in the passenger compartment of a vehicle. Strap containers down tight to prevent movement in the vehicle, and cover containers with a tarp to protect them from wind and rain.
- You are responsible for accidents or mishaps prior to arrival at the pesticide drop-off site, please drive safely.




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Assessment Forms

- Survey forms
 - Top half with farm name, etc.
 - Bottom half pesticide info
 - Type, amount, container condition, chemical type
- Survey forms were submitted to County Farm Bureau Office
 - Top info separated from bottom info
 - Only FB agent knew the identities
- Somewhat problematic
 - Inaccuracies in estimating amounts

Collection Events

- Conducted by a contracted licensed hazardous waste firm



Accomplishments



Pesticides Collected in L'Anguille Project

County	2006		2007	
Craighead	6/3	4,986 lbs.*	3/14	8,705 lbs.
Woodruff	6/28	4,602 lbs.*	3/13	6,311 lbs.
Poinsett	9/28	27,298 lbs.	3/28	10,569 lbs.
Lee	10/10	10,898 lbs.	11/7	11,785 lbs.
St. Francis	10/11	1,018 lbs.	11/8	15,925 lbs.
Cross	10/12	10,259 lbs.	11/9	19,471 lbs.
Total	131,827 lbs	59,061 lbs.		72,766 lbs.

* No education prior to these collections



Collection Dates/Costs

County	2006		2007	
Craighead	6/3*	\$8,734	3/14	\$13,011
Woodruff	6/28*	\$9,179	3/13	\$10,258
Poinsett	9/28	\$38,390	3/28	\$15,154
Lee	10/10	\$16,807	11/7	\$16,553
St. Francis	10/11	\$4,171	11/8	\$23,614
Cross	10/12	\$27,998	11/9	\$25,392
Total	\$209,261	\$105,279		\$103,982

Challenges & Things Learned

- Gaining the producer/landowner trust of the process
- Finding suitable locations for collection events
- More lead time in the early collection
- No collections during planting or harvest



Other Ag Materials to Think About

Plastics

- Irrigation pipe/tubes
- Containers
- Films – mulch
- Ag Bags
- Super Sacks/Bulk Bags
- Hay wraps
- Cotton module covers



Paper

- Feed sacks

Organics



Used Oil, Hydraulic & Transmission Fluids

Used Oil Heaters

are a source of **Free Heat** for farm shops.

And are a clean way to dispose of these fluids

Recycling Tax Credit in AR – certain requirements apply



Questions ???



Contact Info

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