

# PASQUOTANK RIVER BASIN REGIONAL COUNCIL

Albemarle-Pamlico Regional Councils  
"Kick-off" Meeting  
September 25, 1997 -- Plymouth, NC

## Results of Regional Councils break out sessions

During a break out session at the September 25th Regional Councils "Kick-off" Meeting, members of the Pasquotank River Basin Regional Council were asked to respond to the following question:

*What are the priority environmental concerns in your river basins?*

Below are the results/answers given by members who participated in the break out session.

### Concerns:

- Government continues to expand around issue but nothing happens
- not enough effort toward actual clean-up
- sounds in NC are very unique with unique & complex problems
- growth is occurring rapidly (more traffic, increased tourism)
- increasing use of aquifer leading to depletion of groundwater
- no simple rating system for rivers to determine "good or bad" water quality
- responsibility for water quality problems will be placed disproportionately on agriculture
- recommendations and initiatives will be changed when they are taken over by agencies
- salinity of Currituck Sound
  - too much
  - wide fluctuation
  - canals to the north
  - diversions from North River headwaters
- sedimentation/erosion problems
- plan development in a deliberate and environmentally sensitive manner
- preservation of "green spaces" & environmentally sensitive areas

### Hopes:

- rivers flowing to sound be declared "clean and good"
- projects will be pursued that will tangibly affect water quality
- better coordination of state agencies (DMF, DWQ, DCM, etc.)
- Council should promote public education on water quality issues
- need to bring more young people into the process
- Council could approach local elected officials to determine their priorities and concerns
- responsibility for water quality problems is balanced between all interests



# NEW GROUND

HINTS, TIPS, INTERESTING INFO, AND THE LATEST RESEARCH

## The EPA's herbicide history

**W**e have been reporting extensively in recent issues on the dangers posed by the ever-increasing use of ALS/SU herbicides. Research has shown that even microscopic drift of these chemicals is potent enough to cause plants to produce no harvestable crop, yet often "allows" the plants themselves to appear completely normal. Now, through documents obtained by ORGANIC GARDENING magazine via the Federal Freedom of Information Act, we have learned that EPA scientists urged that these super-potent plant-killers be banned or restricted when the chemicals were first submitted for EPA approval back in 1981, and that the EPA has known of the dangers posed by these chemicals for well over a decade!

### Oh Gee!



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDE PROGRAMS WASHINGTON, DC 20460 <b>FREEDOM OF INFORMATION          REQUEST RESPONSE</b>	INITIAL RESPONSE	REQUEST IDENT. NO. 3512-96
	ADD'L RESPONSE 1	DATE 11/18/94

1. We are enclosing records you requested.  
 We believe that they fully respond to your request.

### Our Freedom of Information Act filing uncovered very disturbing herbicide information.

Specifically, the internal EPA memo released to us through the Freedom of Information Act documents the hundreds of drift damage reports the EPA has received concerning these herbicides since they first came on the market in 1982, and reveals that the EPA's own scientists had warned of such an outcome *and* had recommended against the approval of these potent and plant-deadly chemicals. Here are some highlights from that internal agency "memo" (more than 30 pages long, including all the "attach-

ments"), dated March 24, 1994 and titled "Qualitative Assessment of Sulfonylurea Herbicides and Other ALS Inhibitors." The author is Anthony Maciorowski, Chief, Ecological Effects Branch, Environmental Fate and Effects Division (EFED); he sent the memo to Evert Byington, Chief of the Science Analysis and Coordination Branch of EFED:

\*In 1981, as the first SU herbicide registration application was being evaluated, the agency's Environmental Effects Division recommended that "SUs not be regis-

tered" because they "are excessively persistent in the environment and they cannot be detected at low levels." But the agency did not heed its own staff's warnings, and in 1982 DuPont's chlorsulfuron herbicide, "Glean," was registered by the EPA. (In one of the attachments to the memo—"document #9," a response from DuPont concerning drift problems—DuPont representative T.J. Hernandez calls Oust, a similar early SU product, "a hot, mobile herbicide"!)

\*By 1986, it is noted that SU/ALS herbicides were being widely used, and the EPA was beginning to review "numerous reports of widespread plant injury following the [use] of clomazone (Command)," an ALS used on soybeans.

\*The memo acknowledges that SU herbicides were all "approved with no nontarget plant or drift exposure assessment." While the EPA realized the potential danger, it did not require herbicide manufacturers to conduct studies to determine how the chemicals might affect "nontarget" plants (like the ones in your garden, farm crops, or the wild plants that birds, beasts and bees depend on for survival).

\*In 1989, the EPA received initial reports of suspected SU drift damage in the Horse Heaven Hills area

by Signe



## NEW GROUND

of Washington. "Injury to cherry and apricot trees was extensive (death often occurred) up to 2 to 3 miles distant from the wheat growing areas" where several herbicides were being used. At this point in time, notes the memo, the EPA met with DuPont representatives, who while defending their herbicides, also revealed that they were receiving reports of "approximately 90 [SU herbicide drift damage] incidents per year in the Red River Valley area of North Dakota." Federal law requires manufacturers to report all such "adverse effects," but the EPA memo suggests that DuPont was ignoring this law, because it states that "no adverse effects reports for these incidents have been filed with the EPA to date."

\*In 1990, monitoring began in the Washington area where fruit trees were dying and other, healthy looking trees were producing little or no fruit. It revealed that the area in question was subject to "as many as 30 SU type 'hits' each year." The EPA also learned of "extensive injury to thousands of acres of potatoes in Colorado [with] movement of Oust [an SU herbicide] from a treated railroad right-of-way suspected as the cause." The memo then makes reference to studies at Colorado State University that "determined that any spray drift resulting from Assert, Harmony Extra or Oust applications [those are all SU herbicides] would cause totally unacceptable adverse effects to potatoes" and that "Oust caused significant phytotoxicity to potatoes at the lowest dosage tested, 10 parts per trillion!"

\*In 1991, EPA scientist Tom Pflieger and his colleagues began the study of SU effects on cherry trees in Washington state that we reported on last spring ("New Ground," May/June 1996). As soon as the study was completed, Pflieger and EPA pesticide specialist Karl Arne

(one of the "stand-up guys" who defended that initial 1996 report on these herbicides that DuPont attacked us for) recommended "that serious consideration be given to [banning] further SU aerial applications."

\* The memo concludes: "The 'weight of evidence' for the SU herbicides (field studies plus incidents) indicate potential for serious adverse effects to nontarget plants following aerial application, and potentially from ground application equipment and/or drifting/wind-blown soil particles. This coupled with the current inability to detect the SUs and other ALS herbicides leads the Environmental Fate and Effects Branch to recommend that the EPA:

- 1 prohibit aerial spraying of all ALS herbicides.
- 2 review and revise ground application directions on all such herbicide labels.
- 3 require field studies to monitor herbicide drift and to determine the levels at which such drift residues are toxic to non-target plants.
- 4 issue a moratorium on the further registration of ALS herbicides until methods are commonly available to detect residues at the [extremely low parts per trillion] levels in soil, water, air and plant samples that are toxic to plants.
- 5 initiate studies comparing the relative toxicity of these herbicides to each other and to other herbicides.
- 6 limit total usage of SUs to reduce the impact on the total ecosystem.
- 7 involve the Fish and Wildlife Service.
- 8 initiate an in-depth review of this class of herbicides, and improve incident reporting and tracking systems.
- 9 require studies to determine how rapidly target plants [the weeds that these chemicals are supposed to be killing] are developing resistance to ALS herbicides, and consider if ALS herbicide registrations should be limit-

ed because the products are no longer effective in killing the weeds they are targeted against."

Those recommendations were all made in 1994 (some were "repeats" of suggestions made much earlier). But most of these recommendations have still not been implemented almost 3 years later—and millions of acres of crops and an unknown amount of forest land continue to be sprayed each year with these chemicals. And, there are numerous applications pending from chemical companies for approval of new SU herbicides (large sections about these new chemicals were blacked out on the Freedom of Information Act copy we received).

## Yes, compost conquers all!

The disease-preventing power of compost continues to make headlines. This time, tests at Exeter University in Britain have



Take the compost cure!

confirmed what many organic gardeners around the world already knew—that plain old compost is very effective at preventing numerous plant diseases.

In the Exeter tests, compost made with green waste suppressed disease "far better than we'd ever expected," reports Tom Young, managing director of Ecological Science, a compost company that collaborated with the University. The researchers inoculated two plots of soil with specific disease organisms, applied compost to one of the inoculated plots but not to the other, then planted crops in both plots. The

ROB CARDILLO

## Calendar of Events

- MAR. 1. GARDEN PLANNING SYMPOSIUM. Old Sturbridge Village, Sturbridge, MA; (508) 347-3362.
- MAR. 1-APR. 13. BUTTERFLY EXHIBIT. Frederik Meijer Gardens, Grand Rapids, MI; (616) 957-1580.
- MAR. 1-2 & 8-9. RIVER OAKS GARDEN CLUB AZALEA TRAIL. Houston, Texas; (713) 523-2483.
- MAR. 2-9. PHILADELPHIA FLOWER SHOW. Visit OG's major exhibit highlighting the history of organic growing around the world—and catch Editor-in-Chief Mike McG on the 2nd and 8th. Pennsylvania Convention Center, Philadelphia; (215) 988-8899.
- MAR. 5-9. FLOWER & GARDEN SHOW. Washington Convention Center, Washington, DC; (703) 569-7141.
- MAR. 7-9. WESTERN SUSTAINABLE AGRICULTURE WORKING GROUP ANNUAL CONFERENCE. Sunrise Ranch, Loveland, CO; (206) 935-8738.
- MAR. 15. Editor-in-Chief Mike McG helps celebrate Garden Faire at the PENNSYLVANIA BUILDER'S SHOW. Farm Show Building, Harrisburg, PA; (800) 281-5539.
- MAR. 15. HERB FESTIVAL. Mt. Carmel Herb Farm, Walterboro, SC; (864) 585-0102.
- MAR. 21-23. BIOINTENSIVE GARDENING AND MINI-FARMING WORKSHOP with John Jeavons. Wilson College, Chambersburg, PA; (707) 459-0150.
- MAR. 23. LECTURE. "Bringing Ferns to the Garden," by noted author Dr. John T. Mickel. New York Botanical Garden, Bronx, NY; (718) 817-8747.

