

MINUTES
VEGETATION MANAGEMENT ADVISORY COMMITTEE
November 10, 2004

MEMBERS PRESENT: David Bingham, Karen Bodner, Paul Clements, Doug Graves, Molly Hoffer, Mike Kesling, Mike Koivula, Chris Melotti

MEMBERS ABSENT: Sandra Corbin

STAFF PRESENT: Sonny Chickering, Stephonee Colley, Bill Manewal, Arno Nelson, John Petsch

BCC PRESENT:

GUESTS PRESENT: Dr. Carol Mallory-Smith (OSU), Shane Latimer (Jones & Stokes)

Chair, Chris Melotti, called the meeting to order.

I. PUBLIC COMMENT:

None

II. APPROVAL OF MINUTES – SEPTEMBER 8, 2004

MOTION: Hoffer moved to approve the Minutes of July 14, 2004 as written. Bingham seconded. All present voted in favor. Motion passed.

**III. PRESENTATION ON GMO'S (GENETICALLY MODIFIED ORGANISMS):
DR. CAROL MALLORY-SMITH, OSU**

Manewal introduced Dr. Smith from the Crops & Soil Science Department, Oregon State University. Dr. Smith said she would like an informal discussion versus a formal lecture and invited the Committee to ask questions at anytime. She said she was told the Committee was more interested in knowing about genetically modified grasses, so she started with discussion about genetically modified perennial grasses and some benefits and concerns that have been raised. She explained that her area is weed science, which includes knowledge of herbicides and herbicide-resistant crops, rather than traits that are being put in crops. When transgenic plants were introduced, the largest area was in herbicide-resistance traits (Roundup) because it was easier and it adds a lot of value in the beginning. There are other traits that have been put in, such as disease-resistant or insect-resistant DNA (corn, cotton). Other traits include male sterility, drought -resistance, and salt tolerant DNA for grasses (these traits could have different ecological implications than the herbicide resistant trait – with disease-resistance and drought-resistance, there could be a different ecological response because then plants could start growing where they weren't able to before, especially with drought-resistance). One of the herbicides being used is Roundup, so most of the crops are glyphosate-resistant. A lot of crops are Glufosinate resistant (Rely, Liberty, Finale, Derringer), but not nearly as much as the glyphosate crops. Worldwide, most soybeans are now Roundup resistant. Some other herbicides being used are Glean, Oust, and a few others. Other crops that have been introduced are canola and corn. Wheat is on hold (marketing issue). The next Roundup

resistant crop to be introduced is probably alfalfa, which is set to go through deregulation soon. Sugar beets were deregulated, but they won't be purchased. In the U.S., Roundup resistant crops are dominant in the market and considered a better product because of broad-spectrum weed control. Clements asked if deregulation in the U.S. is transferable with Canada, or do they have to go through a parallel process, and Dr. Smith said it's a parallel process, although in Canada, they treat non-transgenic. In the U.S., there is Imidazolinone-resistant weed, "Clear Field" (trademark for Imidazolinone-resistant) system, and didn't have to go through any of the regulations that the Roundup resistant crops do because it's not transgenic.

There is wheat grown in Oregon with varieties produced by Oregon State University in conjunction with the company BASF. Dr. Smith said that most foods eaten, unless they are organic, are treated with herbicides. In the U.S., mutagenic or other types of breeding are considered traditional breeding because no foreign DNA is being put in it, although DNA may still have been changed. Roundup resistant crops were introduced in the mid-90s, and now have taken over a huge market share of big field crops, such as corn, cotton, and soybeans.

Perennial grasses in this context are ones resistant to glyphosate (Roundup) or Glufosinate (Rely), which if they are introduced, they will be called Roundup Ready or LibertyLink to go along with the rest of the herbicide groups. The grasses under development right now are creeping bentgrass and Kentucky bluegrass, found frequently in Oregon. Creeping bentgrass is often found on roadsides throughout the Willamette Valley, although not transgenic at this point. A lot of the seed production for this grass for the world is centered here in the Willamette Valley (less than 10,000 acres actually used for seed production). Seeds are used on golf courses, and that's where the desirable part of having a Roundup Ready creeping bentgrass is in the end use so that has broad-spectrum weed control. Dr. Smith said that she doesn't work with turf, so the disconnect for her is how these crops can be produced without causing problems. Kentucky bluegrass hasn't been released in as large an area as the creeping bentgrass. Kentucky bluegrass is still under development and it's close to being released, but the creeping bentgrass may be the first.

It was decided that transgenic Roundup Ready creeping bentgrass would not be produced in the Willamette Valley (didn't want contamination to other production), but would be produced in Madras, Central Oregon, in a special controlled district. Only transgenic, no conventional grasses, was planted. There were a lot of requirements regarding how the grass would be grown, including a dedicated combine, and clearance around the fields so that the gene could not move. Issues raised are that the grass is a perennial, an out-crossing species, and it is wind pollinated. It also has compatible wild and weedy relatives, so there are plants that the grass will cross with. Hybrids could be produced, and since Roundup resistance is a dominant trait, those crosses would be Roundup resistant. Bentgrass seed is very small (a million grass seed per pound, and extremely small). Bentgrass would cross with Redtop to produce hybrids, and although unique, bentgrass could cross genera with the rabbit foot species. The end-consumer for bentgrass is the golf courses, but the downside is that resistance grasses will cross-pollinate.

Bodner asked if studies have been done regarding human consumption of plants with altered DNA and Dr. Smith said that the FDA (Food & Drug Administration) does these studies and has to be able to say that there is no difference between the natural and DNA altered product. Dr. Smith also explained that DNA is put into the protein of the plant, which is not actually consumed by humans. The oil (canola) and sugars are the actual components consumed. Proteins, if any, are already broken down before consumption.

Dr. Smith said that in weed science, the concern is if there is an increase of use in a particular herbicide, it is more likely to select the herbicide-resistant weeds, which is what has happened in

soybean production. Another concern is volunteer crop control, as another solution has to be found. Glyphosate is considered a lesser toxic herbicide to use, and less herbicide is now being applied to weeds, which is simpler and better. Species shifts are another concern if a particular herbicide is always being used.

Based on what golf course superintendents say, if there is something that could kill annual bluegrass on the green, there would be less disease in the turf, and they would be able to apply less fungicide in addition to less herbicide.

A study was done in summer 2003 by the Corvallis EPA in Central Oregon (Madras) where they experimented with pollen movement and placed plants out for about 20 miles. They went back to pick up the plants, removed seeds, and checked for changes in genes. At a distance of 13 miles, they found pollen movement. Because of how far the pollen and seed moved, the 400 acres of testing area for the grass was destroyed (fields were repeatedly sprayed with Select, mowed, and burned, treated with more herbicide, then plowed). The areas around the fields are being monitored with trait checks (like pregnancy tests that allow testing for genes in plants – can order kits from the internet). There has been movement off the fields via a “wind event”. Dr. Smith said that this is such a big issue that if movement cannot be tolerated, then it shouldn’t be done. Pollen movement and seeding cannot be prevented. The selected 400 acres were planted in 2002, before APHIS was ready with any kind of deregulations, then crops were harvested in 2003, and APHIS still hasn’t deregulated it. Based on the gene flow study by the EPA, APHIS has now stated that an environmental impact assessment needs to be done. More studies need to be done to prove there is no impact (the male sterility systems now being developed for creeping bentgrass will solve pollen movement, but does not solve seed movement). Dr. Smith said there are a lot of issues, and in her opinion, most of these issues are agronomic farming issues, not ecological issues.

Kesling said that in his experience in the Willamette Valley, he sees the other side of seed production as an economic impact. He said that grass seed growers aren’t interested in having the Roundup resistant grasses here because of the potential release and problems that it could cause, and also, Roundup is targeting one of the highest valued grass species produced within the Willamette Valley.

Clements asked if there is a case study completed for the crops in Central Oregon. Dr. Smith said there has been an EPA article published in the proceedings of the National Academy of Science within the last few months.

IV. SWEEPIN’ THE BROOM SUBCOMMITTEE REPORT – MOLLY HOFFER

Subcommittee changed name to “Noxious Weed Committee.” Hoffer provided a meeting report as an additional handout, which contains a mission statement, actions to take, and potential areas of interest. Hoffer said Melotti will serve as subcommittee liaison to coordinate with other agencies. Bodner said she is going to be liaison with local media and grants research. Hoffer said she is going to be focusing on how to get information back to Staff. She also asked that if there is interest, they need more subcommittee members.

Latimer offered to send information regarding noxious weed work that he did for the short mountain landfill as well as other Oregon landfills (one-page manual for controlling the most common weeds, like blackberries and the like).

V. ROAD MAINTENANCE MANAGER / OPERATIONS UPDATE – BILL MANEWAL

Manewal reported that road crews are finishing up with full-width right of way mowing; working with heavy brush machines for brush mowing in conjunction with next year's chip seal and overlay road projects. De-icer product and sanding is set up. Replacement of the small grass tractors has been approved by the BCC, and it is planned that the John Deere units will be received in spring.

Petsch reported that the leaf pick-up has started in Santa Clara this week, and will continue over into Springfield next week. They hope to be complete in January (pending weather activity).

VI. REVIEW & RECOMMENDATION OF APPLICATIONS TO THE BCC

Chickering informed the Committee that Sandra Corbin has withdrawn her application. He confirmed that there are five openings and five applicants. Bingham said he turned in an application, but was not received by Staff. Melotti asked what the closing date was for applying, and Chickering said it was 10/15/04. Bodner said Melotti's application was dated 10/19/04. All applicants included with the November agenda packet were contacted, with the exception of Sandra Corbin and Chris Melotti. Colley explained that Staff had said the vacancy notice would run 10/1 through 10/31, but it actually ran 9/15-10/15. Melotti said he sent his application in based on what Staff said (his application was accepted by accident).

Melotti motioned that the Committee retain David Bingham, and Bodner seconded. All present voted in favor. Motion passed.

Hoffer motioned that the Committee retain Chris Melotti, and Bingham seconded. All present voted in favor. Motion passed.

Melotti asked the Committee to review the four remaining applications for the three available vacancies. Melotti said there are three whose applications are now being considered a second time (Moser, Orbeton, Forester). Latimer suggested that the person not appointed to the Committee be considered as a member to the subcommittee.

Chickering asked the Committee to decide what criteria to consider when selecting new members. He suggested looking at where applicants live for demographic balance, and/or employment (balance for prospective, i.e., farming, industry, etc.). Also, he suggested basing selection on interests. Chickering told the Committee that they could recommend to the BCC that they appoint "x" number of applicants, then reopen the vacancy notice for additional submissions, but not disqualify current applicants. Clements said the Committee should pick from the current applicants and not postpone the selection process. Hoffer asked to clarify who the outgoing members are and Chickering confirmed Doug Graves, Mike Koivula, and Sandra Corbin. Koivula said he never heard that he was supposed to reapply (he missed the September meeting), but would have.

Melotti said that the Committee should step back since two of the current members would reapply had they been fully informed. Chickering said that applications were mailed to each current outgoing member, separately from agenda packets. Koivula said he did receive a blank application but no cover memo. Colley said she sent out applications along with a printout of the website information for the committee.

Clements motioned that the vacancy notice be reopened for another suitable period of time, and Melotti seconded it. All present voted in favor. Motion passed.

Staff will hold all current applications and add them to newly received applications for consideration at the next meeting to select new members.

VII. JONES & STOKES REPORT – SHANE LATIMER, J&S

Latimer reported that he's been working to collect information (with help from NCAP) from other jurisdictions that are currently under a no spray policy. He explained that the Scope of Work for J&S was to create a report (1st piece) to include definitions in context of the ordinance, which was difficult. He said he found glitches and incorrect usage in the ordinance that will need to be worked out. The next part of the work was to look at biological, mechanical, and possibly structural things that other jurisdictions are using as methods to control or deal with roadside vegetation. A final analysis will cover what the cost and success is to the other jurisdictions and what the recommendations are for Lane County. Additional tasks include creating a preliminary list of approved products that can be used, and a report template. The report template and the methodology analysis are not yet complete (waiting on information to come back from other jurisdictions). Petsch is working on answering a list of questions submitted by J&S, which then will be added to the Scope of Work.

Latimer said Jefferson County, WA, decided 20 years ago that they would reduce herbicide and pesticide usage along roadside vegetation, and they have used very little if any type since. However, the Willamette Valley is a particular ecotype – great for growing grass, and also great for weed growth. In 1997, J&S worked with CalTrans to reach a goal to reduce herbicide use by 50% by year 2000, and 80% by year 2012. CalTrans derived a way to hit their 50% target. CalTrans used alternative vegetation on roadsides, such as native grasses thought to manage on its own. This method proved too expensive, so it is no longer practiced. California started using mulch on roadsides to hold down vegetation (readily available from landfills, recycled glass particles and plastic panels). They've also started paving under guardrails to avoid having to manage the areas. The 80% goal is not believed to be realistic, due to fire issues.

Latimer believes that Lane County's scenario is the middle of these two types of jurisdictions, and that Lane County isn't controlling the vegetation right now as well as it could be. In a few years, there may be problems with overgrowth that can't be controlled as easily as if herbicide was used. He said the management of roadside vegetation for Lane County includes the shoulder, a ditch, a clear strip, and then some vegetation. In other jurisdictions, they've decided which parts of these areas they will maintain and what their thresholds are. In short, Lane County may need to decide which parts of the roadside it will maintain, what works, and what is cost effective (District 3 in Salem is currently using a grader called "The Retriever" that moves along the edge of the shoulder to remove vegetation).

Latimer said he's planning to finish the bulk of the Scope of Work within the next week (50% complete at this time). Hoffer asked about Latimer's comment that the Last Resort Policy contained glitches that precluded its implementation, and Latimer said that he believes that the way the ordinance is written, it is not the best it could be. He said that it can be broken into three parts: 1) to use alternative methods of vegetation control; 2) to use herbicides, but cut it down and create a list of herbicides in descending fashion over time; and 3) that the ordinance makes it difficult to use an herbicide if it is desired to be used for a special use, and that there will be complex criteria that must be met first. Latimer said that lowering herbicide usage is a trend all over the U.S. A lot of literature and information is becoming available all the time. He recommended that the ordinance be cleaned up, but for implementation, it works.

VIII. NEW BUSINESS

2. DATE AND AGENDA ITEMS FOR NEXT MEETING: WED., DECEMBER 8, 2004

- CONTROLLING KNOTWEED IN THE PACIFIC NORTHWEST – PRESENTATION BY JODI LEMMER, COORDINATOR FOR THE EAST LANE LOST CREEK KNOTWEED PROJECT
- SUBCOMMITTEE PRIORITIES – SONNY CHICKERING
- REVIEW & RECOMMENDATION OF APPLICATIONS TO THE BCC
- FAREWELL TO OUTGOING VMAC MEMBERS

Meeting adjourned at 7:35 p.m.

Recording Secretary