



1st Herbicide Roundtable
January 9, 2013

Agenda

1. 9:30 AM – 9:45 AM: Introductions
2. 9:45 AM – 9:50 AM: Relative Toxicities of Imazapyr vs. Aminopyralid (knotweed)
3. 9:50 AM – 10:15 AM: Seeing Herbicide Resistance and Addressing It?
4. 10:15 AM – 10:30 AM: Landowner & Contractor Trainings w/ Herbicides
5. 10:30 AM – 10:45 AM: Pesticide Stewardship Partnership
6. 10:45 AM – 11 AM: Protocols for Tracking Herbicide Applications (re: NPDES Requirements)
7. 11 AM – 11:15 AM: Non-target Impact Studies/Observations?
8. 11:15 AM – 11:30 AM: Which Certification is Right for Public Employees?
9. 11:30 AM – 12 PM: Roundtable Updates/Sharing

Minutes

1. Everyone introduced themselves, received parking passes, refreshments

Mary (WMSWCD): Focus of roundtable forum for herbicide application/education, effectiveness, trials, public messaging, clear distinct, pesticide stewardship partners, ecologically sound, assess studies/articles, future meetings (when and with more focus)

2. Knotweed: treatment with Imazapyr, Aminopyralid, Glyphosate...ecological fate and concerns

Mary: Imazapyr-translocation through roots, impacts to restoration projects, Aminopyralid-mobility through soil, persistence, compost, ruminants, die off?

Lucas (EMSWCD): has noticed several large hardwoods die or impacted where knotweed has been treated.

John (Portland Parks and Rec): Imazapyr was developed to be root active, bad for compost, good microbial degradation when in contact with soil

Mary: what about straw treatment

John: label warnings and avoidance

Rob (Clean Water Services): concerned that Aminopyralid remains in the canes of knotweed therefore remains on site

Mitch (Metro): aquatic work with *Ludwigia sp.* with Brenda Gruel, Imazapyr was used in estuarine and chemical was more than likely moved by tide, negative results. Within a closed system using Aminopyralid there was no re-colonization.

John: Imazapyr dissipation rapid in water, referred to risk assessment article

http://www.ecy.wa.gov/programs/wq/.../risk_assessment_Imazapyr.pdf



Rob: Cane of knotweed has persisted 3 to 5 seasons, suggests chopping to enhance deterioration, epistatic growth in knotweed with Aminopyralid.

Sam (CSWCD): Residual impact by duff layer?

John: Soil microflora is normal in duff.

Mary: Hopes the group will bring concerns to academia

Elaine (Metro): Aminopyralid, still plant with bare roots?

Mary: Concern is when it is in plant tissue

Elaine: No planting in plant material

Lucas: Restoration bare root planting has worked fine, private property results not so good because of other factors

Rob: A study at the coast showed that the rhizome mats inhibit growth with or without the presence of herbicide. Seeding did not work, even desperate enough to use Reed Canary grass. Believed that physical removal of mats would be the best approach. Possibly indicating allelopathy or just the high amount of biomass to be detrimental.

Mary: Lets revisit Aminopyralid, thought soil was not a quick, lets share studies within email group, social media, articles

Lauren: I suggest an articles tab or page on the website

Rob: we should look at national studies/papers regarding herbicides

3. Herbicide Resistance

Mary: Too much glyphosate...Toby's concoction for English Ivy is wonderful

Andrea (Oregon Parks and Rec): Resistance of herbicide for Rattail Fescue (*Vulpia myuros*) at a prairie project

Will (ODOT): Resistance adjacent to crop sides, lots of Russian thistle, when cost of herbicide goes up so does the thistle population. In the Willamette Valley, annual rye grass is sprayed in the fall and is supposed to last until harvest, chemicals become week over time.

Elaine: Best management practices should focus on correct timings, correct concentrations

Julie (EMSWCD): We need to be cautious with more chemicals, it's not always better. Also cautious



with rotating chemicals. Resistance is genetically developed, chemically not effective, resistance claims need genetic data.

Mary: Bring weeds that are thought to be resistant to academia

Rob: herbicide resistance in garlic mustard, in other parts of the country: cropping vs. natural

Noah (JCWC): garlic mustard site treated several years with a combination of glyphosate in early May, when returned to check on site, plants were brown but covered in seeds

Sam: We are seeing resistance by selective pressure. Manual removal should be integrated method with herbicide application. Dr. Ian Heap surveyed for herbicide resistance plants, hand pulling resistance with morphological changes.

Elaine: Glyphosate least likely to cause resistance development

John: Morphological changes are true and interesting

4. Land owner and Contractor training

Mary: Referred to article from Vern. Worried we are sending mixed messages when we use herbicides but tell the public not to. CWMA trainings should use “Grow Smart, Grow Safe” by Metro. I want to check with Carl about this.

Not sure who said this: land owners use chemicals no matter what, King Co. has a good program, IPM documents are good, and website is good.

Jane (WMSWCD): Rural landowners, people with small amount of acreage should perhaps have their own work shop part of Rural Field Day.

Will: Suggested people use the Pacific Northwest Weed Management Handbook

Kathy (NRCS): That handbook is not user friendly.

Rob: Connect meeting issues with regions, roadshows, partners with OSU

Elaine: There are lots of alternative pesticides, but the general public not literate with chemical labeling.

Julie: Pesticide information, maybe ODA can help out

Gaylen (Columbia Land Trust): Once pesticides are mentioned people often stop listening regarding back yard habitat programs. Messages regarding pesticides need to be consistent

Julie: Not using is good for water quality don't have to worry about run off. Herbicide use varies with different size sites and some containers are too big for a normal lot size.

Jane: Maybe we should have handouts that state what circumstances we should use herbicides for YGP



show, don't rely on Home Depot staff

Lauren: Use the website to explain the basic chemical explanations, organic chemistry 101, focus on active ingredients not brand names

Mary: basic message herbicides should still be used minimally, IPM sheets have varying techniques

Rob: number one problem is you have to know your pests then know the correct pesticide.

Jeff (CSWCD/NCPRD): we need to come up with a language, use manual first, and chemicals as a last resort, but try not to portray chemicals as the devil

John: people need to know that not all chemicals are bad, and sometimes a better ecological choice

Sam: We need to watch what we say, there is no one size fits all. Schools cannot apply herbicides without every student's parents being informed, regardless if school is in session or not.

Gentlemen with SF hat to the front left corner: We should have business owners as the first defense on the line of education.

Mary: Any contractor issues?

Rob: Contractors are trained to use closed containers, and edrr

Michelle (WMSWCD): Reaching out to landscapers, IPM guides in Spanish is nice.

Rob: Everyone using similar contractors, perhaps contractors should all have edrr training

Rob: training for any contractors

Mary: Weed watcher training...Clark County?

Doug (Nature Conservancy): Rob are these trainings available in Spanish?

Rob: 2014 Spring regional training we should have the IPM sheets for contractors.

Gaylen: Landscape maintenance: Far West Show, Annual Education

Mary: We have aggressively gone after Master Gardeners Chapters. Pesticide stewardship DEQ 319 over TDML, not much of an issue for our chemicals, water quality monitoring, pesticide monitor/stewardship. WMSWCD talked about it, misused.

John: USGS conducts water monitoring; perhaps joining with them would be advantageous

Julie: I am interested in Urban areas water monitoring



Mary: This is hard to track in the urban realm

Sam: Pesticide testing was done in Clackamas, mostly older legacy showed up, should tie in with Kirk Carpenter USGS

John: Major agricultural chemicals still showing up

Tonia (Clackamas County): Johnson Creek is being monitored with a focus on legacy

John: Testing program waterway on golf course, keeping cost in line

Mary: The public wants to know

John: There has been testing on restoration sites.

Mary: I would like to see that data

Elaine: Contact local, reason why

Rob: It's expensive to monitor, doesn't tell you much about source or deposition rate. Water monitoring might divert resources, it's a hard trade off. Results are dubious but pesticides do show up, not always followed up, mostly caffeine and triglycerine.

John: Perhaps useful with small streams coming into property, \$200 per population

Mary: interested on how people are using herbicide tracking, how it is working, estimation of spot spray

Andrea: I have developed a data sheet for tracking

Toby (Watershed Revegetation, City of Portland): We have been tracking within 3' of water bodies

Unknown: Reporting and returning to site "adverse effects" just as important

Sam: Registered all state agencies

Rob: Contractors submit spray log, EcoPac LLC, runs closed container program, pre-mixed chemicals, estimation of feet. Hoping EcoPac will launch app that will work with GIS for mapping, logs are collected when contractor bills ODOT

Sam: 14 day regulation for tracking permits, under 23A

Kyle (Tualatin Hills Parks and Rec): Contractors have to submit, wondering if everyone is abiding



Toby: Usually don't spray within 5', GIS department created a 3' buffer on the maps around water bodies.

Jeff: If you know the gallons used you can use formulas to quantify

Will: Most applications are done by ODOT employees, and database is used immediately, that's ODOTs agreement with DEQ

WEBSITE: password protection option so forms can be accessed

Mary:

7. Non-target impacts

Kevin (Multnomah County Transportation): Treated large patches, Imazapyr

Elaine: Curious about shining geranium control methods, Triclopyr used in prairie setting and the camas suffered. Glen Miller of ODA Glufosinate

Vern (NWI): Shining geranium looked pretty beat

Dominic (BES, Portland): Glen worked on a project near Fern Ridge, the next year 0% cane came back, native cover

Lucas: tree deaths were very random

John: Imazapyr was shown to have no effects on Oregon spotted frogs

Will: loose powdery soils descriptions in labels, dust off target, what we look for in labels. Perhaps we should contact distributor or ODA for more information regarding labels. For example technicians didn't know what a pome tree is so how could they avoid it?

Mary: We need more information internally, more information about amphibian mortality

8. Which Certification is Right for Public Employees?

Mary: Different licenses for similar areas?

Kathy: Make we don't take on a consulting role.

John: I tell people who call in, that I am not a consultant

Mary: Use extension articles

John: I usually tell people what I would do, but remind them it's not for everyone



Mary: ODA suggests to get everyone certified

John: Public land applicators

Laura (City of Gresham): I apply on public land and use the regulatory weed applicators license. ODA is planning on creating application for city/entity.

John: I am aware that these are good, but not wanting to open legislature

Will: Janet Foltz, there are different categories with lots of gray areas, mostly ROW but what with landscaping

Laura: Parks and Rec uses ornamental or ROW

Lucas: ODA just wants you licensed

Andrea: Does anyone have an aquatic category

Mitch/Rob: We do aquatic, Diego Franco has aquatic

Will: I need a contractor for high rock fences

Mary: Verda-high

Ken (watershed revegetation, Portland): Urban force-high, but repel cliffs of rocky butte, hand pulling too, Urban forestry will do this with lifts as well, not cheap

Elaine: *Ludwiga*, has Noah supervised b/c of aquatic certification

Mary: OPEN TIME

John: purchasing/cost is less on herbicides from Helena Chemical which has a state contract, unbelievable savings, contract good through 2014

Will: ODOT is part of buying CO-OP, open in November, I work on products every 5 years, let me know of new products to add

Mary: Private land owners want to use Aquamaster, however not always available over the counter or too much when available, 2.5 gallons

Doug: It is illegal to distribute smaller quantities

Mary: Outreach to chemical companies



Jeff: 18% roundup concentrate

Toby: labels are not clear, there are many products with the work “round up” on them, refer people to “Grow Smart, Grow Safe”

Rob: take caution in recommending brand names, law suits have occurred in the past because of marketing issues

Mary: Active ingredients

John: Use a disclaimer

Rob: OSU master gardeners uses the disclaimers in Pacific Northwest Weed Management Handbook

Mary: Always try to use licensed applicator

Jane: small quantities, talk to retailers, talk to distributors, generic active ingredients

Andrea: develop a list of bad pesticides that should not be used like a “black list”

John: Salmon Safe has a list, hard to deal because of constant changes

Jane: Lisa created a list metro tier 1 through 3

John: King county tiers? A few years ago

Mary: “Grow Smart, Grow Safe” has tiers within the text

John: King county info not complete use with caution, out of data MSDS/label screening

Kathy: NRCS tool, winpst

Mary: Pull together, Dr. Ian Heaps pesticide resistance

Andrea: more info on Ludwiga

Rob: Vanessa Morgan, great talk

Kathy: EPA’s label consultation for fish, potential contact

Elaine: Tech pull out group

Mary: tech section (list updates), ed/outreach, mapping (not needed anymore because of IMAP)

Elaine: Tech group (what people are using right now), I would love to do some brain dumps, unofficial/unpublished treatments for any species



Jane: send out pole, survey monkey

Tonia: half day work session

Rob: weedmapper, maps printed out regional look, distribution in each area

Mary: Initial list from survey ask Lindsey for help

Elaine: Doug worked on it, data not updated

Mary: there is always poor reporting, IMAP/weedmapper are connected, ODA funding required to use weed mapper

Toby: Extended discussion about herbicides never to be used, compare toxicity, where and why for technical breakout session

Lucas: polled at first Pull Together by Dominic

Mary: Looking forward to more time for events like this