Arizona - Dawn H. Gouge, University of Arizona

Washington - Carrie Foss, Washington State University

**Colorado - Deb Young, Colorado State University** 

Oregon - Aimee Code, Northwest Center for Alternatives to Pesticides & Tim Stock, Oregon State University

Wyoming - John Connett, University of Wyoming

Alaska - Corlene Rose, University of Alaska

California - Laurie Brajkovich, California Department of Pesticide Regulation

Utah - Ryan Davis, University of Utah

Hawaii - Thomas K. Matsuda, Hawaii Department of Agriculture

Montana – Amy Bamber, Montana Department of Agriculture & Mary Burrows, Montana State University

Idaho - Chuck Hawley, Idaho State Department of Agriculture

New Mexico - Tess Grasswitz, New Mexico State University

Nevada - Angela O'Callaghan, University of Nevada

Report for Western Region IPM Center - Dr. Peter Ellsworth Report for WERA 1017 group - Dr. Al Fournier

1) Community IPM programs (e.g. schools, public housing, multifamily housing, health care facilities, childcare centers, Tribal communities, boarder, etc.)?

Arizona: Schools, public housing, Tribal communities, and sheltered accommodation.

**Washington**: Schools, public housing, multi-family housing, homeowners, and pest management professionals that work with schools, PHAs, multi-family and other. WSU Urban IPM and Pesticide Safety Education Program has a major focus on educating pesticide applicators that work in public, residential, right-of-way, and natural areas. Our education has an emphasis on effective IPM, environmental protection and personal safety.

**Colorado**: Schools, public housing, childcare, university housing, healthy sustainable homes program for the city of Fort Collins.

**Oregon**: NCAP has worked most with schools, landscapers, and public housing, included multi-family housing.

OSU has a school IPM program, which encompasses public and private K-2, Federal Head Start programs, and community colleges.

Wyoming: School IPM

Alaska: The Alaska IPM (AKIPM) Program provides outreach and technical assistance, answering daily requests for pest ID and IPM control options. These inquiries regarding landscape, schools, household and structural pests, come from hospitals, multi-housing unit managers, schools, museums, botanical gardens, grounds personnel, other groups, agencies and the general public. Existing collaborations include IPM outreach (and pest ID) for rural and native audiences, with the Alaska Native Tribal Health Consortium - LEO (Local Area Observer Network). AKIPM has started a Citizen Science web portal for online specimen ID submissions. Outdoor/field based youth outreach programs regarding insects, invasive species and other environmental sciences are presented to hundreds of Anchorage School

District youth each year. Community councils, in Anchorage and other communities, frequently work with AKIPM for landscape and forest health IPM training.

California: California has programs in school, child care center, and urban IPM.

**Utah**: Schools

Hawaii: None at this time.

**Montana**: Childcare and schools. MSU has a certification program for landscape professionals, and pesticide safety program, Master Gardener training, and diagnostic lab outreach to Tribes, producers and homeowners/landowners.

Idaho: None

New Mexico: Schools, Tribal communities, Master Gardeners, landscape professionals, PMPs.

**Nevada**: Landscape professionals, Master Gardeners.

### 2) Education efforts

**Arizona:** Education events are provided for school communities, public housing managers and residents, PMPs, shelter management teams, and environmental health professionals.

**Washington**: We provide IPM training throughout Washington at a variety of venues, including WSU Puyallup where we have the Structural Pest IPM Facility and onsite at schools. We also provide homeowner, Master Gardener, PMP, and county agent IPM resources online.

**Colorado**: Workshops and seminars for schools, public housing and municipality communities and management entities.

**Oregon**: NCAP work includes educational opportunities. Increasingly these are in the form of informational videos that are sent to our network. NCAP also hold a few trainings each year. Trainings most often happen at conferences held by partnering entities.

OSU provides annual school IPM coordinator training, training at school IPM coalition events, insect ID workshops, and training through intensive pilot projects.

Wyoming: Train school staff

**Alaska**: Community IPM educational opportunities include classes in citizen science, forest health, pest ID, early detection, invasive species, sustainable agriculture, local foods, invasive species ID, Master Gardeners and 4-H Youth education. First detector training, insect ID and pesticide safety training are also facilitated by CES and IPM, with the support of funding partners.

**California**: We have training components in our school and child care IPM programs. We currently have programs that train school District IPM Coordinators and Child Day Care managers in IPM. We have trained 1,775 school district employees since the School IPM program started, 85% of school districts have at least one person trained, these districts accounts for over 95% of the student population in CA. It should be noted that currently California law does not mandate that schools attend IPM training.

We are currently producing a series of seven child care IPM training videos to be released in September 2013 and developing school IPM training videos. We are funding an active grant project that focuses on training pest control operators that contract with child cares centers in IPM. This grant includes a series of classroom courses for operators and will also have an online training, both will be eligible for continuing education hours for CA pest control license renewal.

**Utah**: For any school that wants information on pest control and for those schools that actively participate in our IPM pilot program. I am working on a Utah SIPM website, as well, so schools can access pest control information.

**Hawaii:** Our Hawaii Department of Agriculture Education Section is able to do so but no request thus far from community.

Our primary focus has been to provide IPM training to Pest Control Operators in Hawaii through a partnership with the Hawaii Pest Control Association of Hawaii.

**Montana:** Childcare and school training and outreach. Master Gardeners, Landowners, homeowners,

Tribes. http://www.urbanipm.org/

Idaho: None

**New Mexico**: Regular workshops for school personnel. Pest diagnostics to all NM residents, pesticide applicator training (to a variety of stakeholders, including PMPs and landscape professionals), as well as Master Gardener training

**Nevada**: Landscape professionals, Master Gardeners, and residents.

## 3) Facilitation of implementation efforts

**Arizona:** A coordinated team with broad expertise provides needs assessments, education events and practicums, school IPM program evaluation, and responds to requests for technical assistance to schools.

**Washington**: Yes, through education, grant-funded and collaborative projects, and Salmon-Safe certification.

**Colorado**: The city of Fort Collins provides materials for homes that are inspected by their volunteers. We train the volunteers, but don't do any implementation.

**Oregon**: NCAP help interested schools, parks, and housing providers design and implement policies. OSU facilitates coalition events and the pilot projects, as well as assistance via phone and e-mail. **Wyoming**: No implementation efforts.

Alaska: Only on a limited basis, facilitating control implementation is not main component of our outreach and pest monitoring work. AKIPM provides research-based, unbiased information on control options and guidance by suggesting components of an IPM plan (both contractual specifications and/or DIY/in-house action items). Our staff and faculty are trained in IPM, provided with reliable support resources, and are state of AK DEC certified as advisors (Category 2 - Demo & Research). Community weed pulls are probably the most "hands-on" projects we collaborate on, although AKPM does cooperate with CWMA's and is involved with supporting and advising on strategic invasive weed control implementation. Also collaborate with IPM Institute to complete school IPM survey for AK.

**California**: Yes, as resources and time allows.

**Utah**: As part of our SIPM pilot program, and for any other school that has desire, USU provides assistance with IPM implementation.

**Hawaii:** Our HDOA Education section is currently working on creating a localized IPM outreach booklet for children in grades 1 - 5. IPM booklet will incorporate Hawaiian words to discuss family members and insects. Story will discuss IPM practices and pesticide safety in school and households. A coloring book section, word find and insect match will be included. It is hopeful that elementary school children will also impact parents with identification knowledge of insect pest and IPM practices IE sanitation, setting threshold levels and health concerns when using pesticide products. We have presented this concept to Region 9 for funding opportunities.

**Montana:** Not at this time. MSU facilitates implementation of IPM through training and recommendations from the diagnostic lab and all specialists.

Idaho: None

**New Mexico**: At the request of individual schools/districts.

Nevada: Master Gardener Training

4) Metrics (knowledge changes, behavioral changes, pest prevalence and pest management practice impacts, health related impacts, economic analysis)

**Arizona:** Knowledge changes, changes in attitude and perception, behavioral changes, pest prevalence, pest management practices, legal compliance.

**Washington**: We measure knowledge and intended behavioral change, pest prevalence change informally.

**Colorado**: Data collected only in schools

**Oregon:** NCAP attempt to analyze our impact through a variety of ways including: noting financial cost of pest management for three years prior to our project and then during the project. We have not had the resources to follow projects into the future to determine the long-term financial changes from adopting IPM. We also track behavior change by learning whether training participants implement the techniques we teach. That is done through post-training surveys. It is often a struggle to reconnect and gather this information but we do manage to get a look into at least a sub-set of our training participants.

OSU measure knowledge changes via training evaluations, behavioral changes via pilot project evaluations, pest prevalence and pest management practice changes via online surveys for K-12 public schools and pilot project evaluations. We do not measure health related impacts due to a lack of funding. We conduct economic analysis at pilot projects where possible.

Wyoming: No, would welcome help

**Alaska**: we keep detailed data, and report using standard logic models and stakeholder surveys as primary tools. Outputs are more easily measured than outcomes with an outreach-based program. Metrics are at the forefront of what the AKIPM program is working to refine and improve upon.

**California**: We periodically survey schools and child care centers regarding their pesticide use and pest management practices.

**Utah**: Since our program is young we have not collect any data beyond that collected from interviews with school employees, PCO's, and information collected during school inspections. Salt Lake City SD has years of pertinent data collected via iPestManager.

Hawaii: No.

**Montana:** MSU measure change in knowledge, intent to change behavior, and actual change in behavior as a result of recommendations/training. MSU do some economic analysis – mainly economic impact of the diagnostic lab. Examples of impact are on the SDL fact sheet at http://diagnostics.montana.edu/PDFs/Schutter%20Lab%20Flyer.pdf

Idaho: No.

**New Mexico**: We usually conduct evaluation questionnaires after workshops (knowledge changes), but lack the resources for long-term follow-up.

Nevada: None

### 5) Outreach materials (in English, other languages, for low-literacy groups)

**Arizona:** English, low-literacy English, a few Spanish, and 1 Mandarin Chinese.

**Washington**: We provide outreach materials in English and Spanish. Working with King County, we are beginning to provide other languages.

Colorado: English and Spanish.

**Oregon**: NCAP have only provided materials in English. Videos are a good way to reach low-literacy audiences. Some NCAP videos have English voice-over. We are interested in inserting voice-over in other languages. OSU and NCAP produce hard-copy extension publications.

**Wyoming**: Outreach materials in English

**Alaska**: Not other than those made available from existing national and regional sources. Presentations are, however, tailored for target audiences.

**California**: Yes, we have lots of written outreach materials, many in both English and Spanish. All outreach materials are written to be easy to read and understand.

**Utah**: we provide fact sheets and personal communication on questions schools might have about pest control. I recently hired an employee who is going to work on translating fact sheets into Spanish.

**Hawaii:** When provided, outreach materials will be in English.

Montana: English.

Idaho: English and Spanish.

New Mexico: We usually provide handouts (in English) at the workshops, and other informational

materials as requested on an ad hoc basis.

Nevada: English

# 6) Community IPM areas eliminated this year due to funding/personnel constraints

Arizona: Multi-family housing, childcare centers and Municipality

Washington: No Colorado: No

**Oregon**: NCAP shank efforts instead of eliminating any specific area. There is clearly more need and interest in our services than we can provide. OSU eliminated their Multi-family housing program.

Wyoming: No

**Alaska**: Community health IPM, such as the bed bug task force, assistance for schools, improving indoor air quality and more extensive structural IPM are areas that the AKIPM lacks funding and personnel to address. We cannot fully meet the demand for IPM consultations and training in these areas, aside for providing some advice and publications.

California: No Utah: No Hawaii: No

**Montana:** We haven't been able to securely fund an IPM coordinator position for a few years now. We do not work in school IPM due to funding, and we eliminated our entomology diagnostician last year due to funding constraints. We currently have the department of ag identify insects and our hort associate extension specialist gives recommendations where requested.

**Idaho**: The Urban Pesticide Program and IPM in Schools activities have been eliminated due to budget cuts and personnel shortages. Prior to 2003 ISDA conducted needs assessments, school IPM workshops, on-site assessments, distribution of outreach materials, and pesticide safety education.

**New Mexico**: We have not eliminated any areas but it is becoming increasingly difficult to keep so many program areas going at once and still feel like we're doing a good job.

Nevada: No

#### 7) Community IPM areas that have expanded this year

Arizona: No

Washington: No. Expanded school efforts

Colorado: No Oregon: No Wyoming: No

**Alaska**: Farmers Markets and the local foods movement are not new to AKIPM outreach, but I have expanded the number of weekends that we are at events to provide educational materials and to promote broad-based IPM. This increase is due to the popularity of these events and the opportunity to reach more community stakeholders.

**California**: We funded a grant to educate retail store employees and customers about IPM. The project resulted in the training of 321 employees in 30 stores, provided outreach to over 2,000 customers, and set up 60 displays of less-toxic products, including traps and tools. (See ipmadvocates.com. Another DPR grant project has established a web site, www.gotantsgetserious.org, that takes consumers through the steps of managing ant problems.

We also presented on IPM for multifamily housing

Utah: No Hawaii: No Montana: No Idaho: No

New Mexico: No Nevada: No

## 8) Top critical community IPM need

**Arizona:** Technical partnerships with Tribes, and long-term health impact studies bridging the home and school environment.

Washington: Community IPM education is critical.

**Colorado**: Weatherization & energy efficiency related to IPM

**Oregon**: Most important need is funding to bring custodial and grounds staffing for public K-12 schools up to pre-2008 levels. Another important need is to resurrect a work group set up by the legislature to assess the state of the state's public K-12 facilities for the purpose of developing a cost-effective investment plan to repair or upgrade school buildings.

Wyoming: No

Alaska: There exists a strong demand for Urban and community IPM educational support for issues impacting HUMAN HEALTH, especially for those occurring within dwellings and structures. The citizens of Alaska require more IPM assistance for solving pest problems, such as the bed bug epidemic, lice, fleas, many household/pantry pests, rodent infestations, carpenter ants, wasp nests, and more frequent cases of something resembling delusory parasitosis (just to name a few). We sometimes hear from clientele too late, or after individuals have reacted in fear, resulting in the overuse and misuse of pesticides. We can do more to prevent these mishaps. In Alaska, there exists a demand to provide cooperative leadership, expertise and outreach, on a statewide level, with facility managers, schools, health professionals, tribal organizations, individuals, and many other stakeholders. A full-time IPM position could easily be dedicated to address these issues in Alaska, if the funding existed.

**California**: Overuse and misuse of pesticides by the public.

**Utah**: General pesticide and pest control education to citizens of Utah would be a good first step toward reducing pesticide use in Utah.

Hawaii: Need to identify critical stakeholders and promote IPM awareness and its benefits.

Montana: Critical—up for argument, but bed bugs in schools has come up as an issue. We are hosting an EPA IPM training on bed bugs in early august for our PMPs and for facility managers. A critical community IPM need for our state is urban entomology. We have no one for education in that area other than what our hort associate specialist can do. The diagnostic lab is in danger of closing if we do not receive funding by August.

**Idaho**: A consistently available forum and vehicle for outreach to pesticide users in all public sectors for promoting and educating on the use of IPM in their pest control efforts, coupled with the funding and mandate to support a state IPM Coordinator.

**New Mexico**: Bed bugs are increasingly prominent. **Nevada**: School IPM implementation program needed.