Keeping Californians Safe When Managing Pests



Californians share a common experience of encountering pests at home, at work, and in recreational areas. Helping everyone to manage pests and protect human-health and the environment requires the broad dissemination of UC's best pest management science. Expanding the network of existing and trusted community-based Cooperative Extension professionals will accelerate the pace and scale of community empowerment by providing information necessary for adopting safer practices to manage pests in and around the places we live, work, and play. Investing to link resources, knowledge, and actions across agencies and organizations through a UC ANR Community Pest Network provides essential capacity, coordination, and science-based-solutions. The Network's success supports wellness and

Improved pest management means healthier communities and households.

healthy environments for all Californians, each and every day.

A Focus on Pests and Health

Common pests - like bed bugs, cockroaches, rats, fleas, mosquitoes - are just a few of the pests that can pose significant health risks in our homes, gardens, parks, and other landscapes. In addition to the direct threat of the pests are the risks that result due to the poor practices many people use in trying to manage pests in their environment - risks to themselves, to others and to the environment. Many poor practices pose a direct threat to human health. A major category of concern is household use of consumer pesticides. People typically have little or no training in either pest identification or in the appropriate application for such products. The extent of this problem is highlighted by the fact that over 80% of the approximately 1 billion pounds of pesticides sold in California, is applied in non-agricultural areas for pest management. While we hear about the concerns with pesticide use in agriculture, that is in fact the sector that is strictly managed. In agriculture in California, all pesticide applications and recommendations are managed by people who must hold the required state license or certification. By contrast, many pesticide applications in urban areas do not require specific licensing or certification.

Opportunity and Outcomes

Integrated pest management (IPM) is a proven method that manages pests while promoting a range of practices that reduce negative effects on human health, the environment, and the economy. IPM focuses on preventing or avoiding pests where possible, monitoring pest populations to determine if action is needed, and, when necessary, suppressing pests using tactics which are effective and low risk. The concept of IPM – which has spread around the world - was developed in California in agriculture and later extended to urban and community pest management. For more than 40 years, the University of California Statewide IPM Program has been providing practical, research-based solutions to pest problems.

The proposal: The Community Pest Network concept will deploy a network of Urban IPM Community Education Specialists to Cities throughout California. The team will reduce pesticide use and danger by focusing on major distribution points and by working directly with the public. To achieve impact, the team will extend IPM practices to the public through retail nursery and garden center employees, multi-unit housing managers, stormwater agencies, and other groups that interact with residents. Information access will be further strengthened by collaboration with existing UC programs, such as UC Master Gardeners and nutrition educators; and developing easily accessed and understood online materials that together will magnify the reach and beneficial impacts.

UC IPM proposes a cohort of Community Education Specialists (similar to the successful Climate Smart Agriculture Specialists team currently housed in the California Institute for Water Resources). The cohort would promote the best and most appropriate IPM practices for urban settings. The team, based and active in target communities, would function as an integrated network to share and implement best practices. They would use a common toolkit of outreach material and presentations to ensure consistent, accurate and safe-to-apply messages. Each IPM Community Education Specialist would address high need issues in their location working closely with an Area Urban IPM Advisor.

Impacts

Reduced and safer use of pest control products and practices will improve health (through enhanced community-level pest management) in the places where most Californians live, work, and play. The health benefits would be seen in both improved human health and in healthier environments. Impact would include reductions in pesticide sales (safer practices and reductions in use of more hazardous products) and improvements in urban surface water quality (e.g., monitoring for decreases in pesticide contaminants).

Who We Are

UC Cooperative Extension (UCCE) experts help build stronger and resilient communities through leadership, outreach and technical skills in natural resources, agriculture, nutrition, youth development and community health. The UCCE network is embedded with county governments and communities throughout California and provides direct access for communities to the extensive, world renowned and impactful research of the full University of California system. As a trusted long-term partner (>100 year history), UC ANR provides educational delivery that empowers communities at every level. UC ANR evaluates and develops practices, disseminates new research and innovations through trainings and guidance documents, provides coordination and capacity for local and state-level collaborative implementation and policy efforts, and helps identify and promote appropriate policies. UC ANR has an existing network of professionals to provide guidance, expertise, and coordination on food systems throughout the state. This effort will offer much needed support to bolster those efforts and fill critical needs.

Appendix for reference:

Possible support

- 1.0 FTE coordinator who works directly with external partners to identify messages and modes of delivery. This coordinator also works with our SWP directors to get content to them.
- SWP directors work with their teams (Community Educators, CE Advisors, volunteers) to share content as part of normal programming
- As a point of reference, a \$1M investment (plus any IDC) would get a coordinator plus 7.5 to 9.0 CES time for a year. That could provide programming and impact for a select set of major cities.