University Hills Integrated Pest Management History

The Irvine Campus Housing Authority (ICHA) develops and manages University Hills, the forsale and rental housing community on the campus of The University of California, Irvine (UCI).

ICHA's Integrated Pest Management (IPM) program encompasses a broad spectrum of techniques and practices. This approach seeks to balance the necessity of controlling animal, insect, and plant pest populations with the community's interest in protecting wildlife and using environmentally-friendly methods. ICHA is collaborating with the Homeowners Representative Board (HRB), Orange County Vector Control and UC Agriculture and Natural Resources to address concerns involving environmental impact while responsibly reducing pest populations.

Rodent Control

ICHA has maintained an active baiting program for many years. From the onset, ICHA has followed industry best practices to control populations of rats, mice, gophers and voles, with a particular focus on rats. ICHA has always used a state licensed and insured pest control contractor to provide rodent control services.

ICHA phased out the use of anticoagulant rodenticide in 2012, the first UCI-affiliated organization to do so. Since then, ICHA has experimented with alternative rodent control methods and found Vitamin D-based bait to be the most appropriate. Various campus entities have since followed suit. Representatives from UC Cooperative Extension, Orange County Vector Control and UC Agricultural and Natural Resources have all identified this product as the best environmentally specific rodenticide for use in our unique University Hills open space, residential community setting.

ICHA's rodent control methods include using locked and secured (weighted/anchored/glued in place) bait stations with limited access to the feeding/trapping chamber sized just large enough for a rat to enter. This restricts non-targeted animals and concentrates efforts specifically on rats and mice. The locations of the stations are uniform in distribution and distance from each other where common areas allow discrete and specific placement along identified rodent pathways. Stations are equally spaced throughout the community.

An active grassroots group of Uhills residents (the HOOT Group) has advocated for transitioning away from using any bait to exclusively using snap traps and owls to control the active rodent population. ICHA's partnership with the resident advocacy group has created what is perhaps the first real-life experiment comparing Vitamin D-based baiting versus snap trap baiting and raptors to control rodent populations. Subsequent data collection in monitoring trapping and baiting activities is providing valuable insight and statistics for UC study groups, OC Vector Control and product manufacturers.

In addition to the rodent program, ICHA promotes its commitment to nontoxic pest control for other areas through the following practices:

- Community/Wildlife Protection Rodent Control All 133 Evo bait stations operated by ICHA are labeled and secured in place, locked closed and serviced once a month. An equal number of baited Evo snap stations are serviced four times per month. Trapped rodents are disposed of properly. The bait used in the bait stations is a vitamin D base that does not harm raptors or mammals who might feed on a dead or dying rodents. Tracking numbers of snap-caught rodents and ounces of bait consumed monthly provides beneficial details on activity, hot spot treatment, product efficacy, program goals and general effectiveness of IPM program operations for budget planning. One week per month, rodent bodies in good shape will be collected and provided to University of California Agricultural and Natural Resources (Irvine Ag Station) representatives for research under a cooperative program.
- Community Common Areas / Buildings / Parks When insects are present (primarily ants) these areas of the community are treated with organic pesticides (oils). Routine monthly repeat spraying is not customary. Management's shift to organic oil insecticide sprays has effectively controlled insect infestation while raising resident awareness and building trust in the use of chemistry in protecting buildings, parks and picnic areas. Applying these oils only when insects are present has proven to be economically efficient and also minimizes unnecessary chemicals in the environment.
- Landscape Weed Spray Control All areas are treated routinely with organic spray products. ICHA coordinates with its landscape contractor to receive notifications in advance regarding which areas are being treated and what product is being used. Signs are posted advising residents of organic spraying in process. Under special and limited circumstances ICHA reserves the right to use other products permitted by the Regents and the CA Department of Agriculture.
- **Ground Squirrel Reduction and Gopher Control** ICHA uses carbon monoxide distribution within burrowing systems to alleviate secondary impact to other creatures and the possibility of secondary poisoning.
- Live Collection and Relocation of Honeybee Swarms and Nesting Bees from almost all locations has resulted in over 36 colonies being rescued and saved over the past three years. Management extends extra effort to save our bees.

For more information, please contact:

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