WEST VALLEY MOSQUITO
AND
VECTOR CONTROL

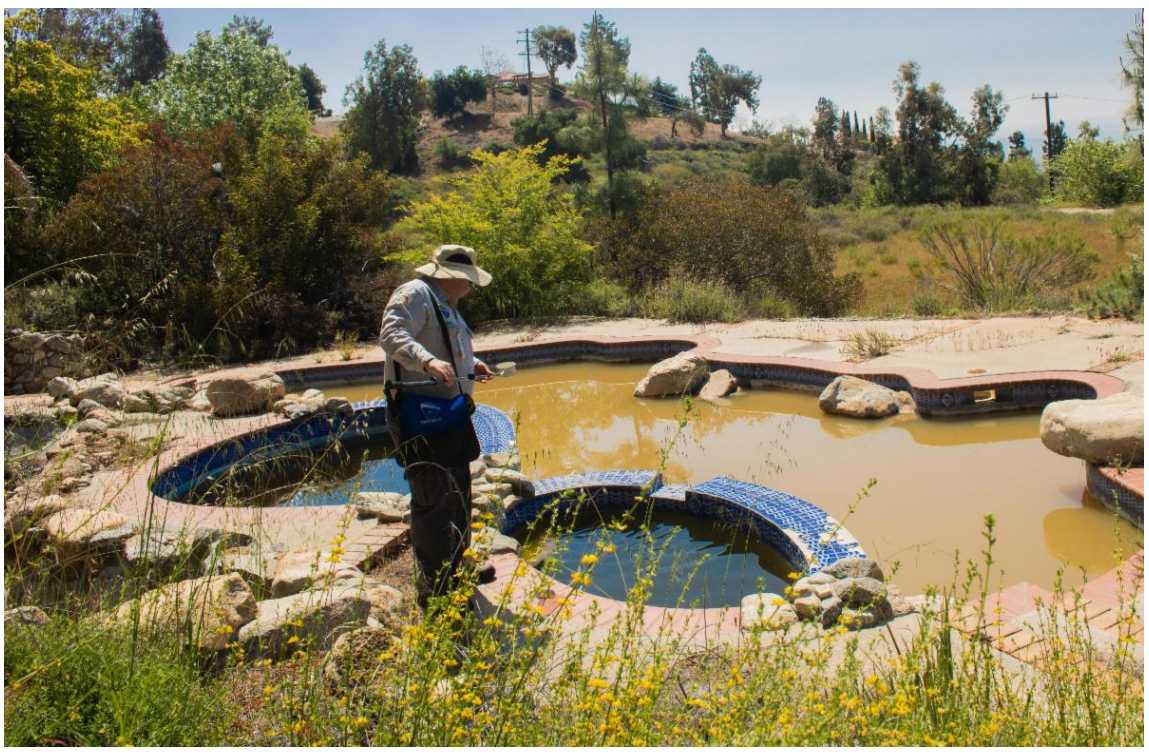
# *The Valley Buzz!*

## Unmaintained Swimming Pools

One of the most infamous mosquito habitats in neighborhoods are unmaintained swimming pools. Just one pool can support hundreds of thousands of mosquitoes, affecting entire neighborhoods. It doesn't take long either, these prime breeding spots provide plenty of food for developing larvae, a protected environment, and stable temperatures, all the elements that can kick mosquitoes' life cycles into high gear!

Pools don't need to be filled to brim with water either. In fact, we find that "half empty" pools tend to be the areas the breed mosquitoes best! Even a little puddle at the deep end can be enough water to generate thousands of flying adults every week!

We know that swimming pools can be expensive to maintain and can be forgotten during the winter months, but don't leave them unmaintained too long as spring and summer creep up; the sooner a pool is emptied or brought up to operable conditions the better. Eliminating these "mosquito factories" before peak mosquito breeding time can mean the difference between a chill backyard barbeque and a full force mosquito bite-a-thon!



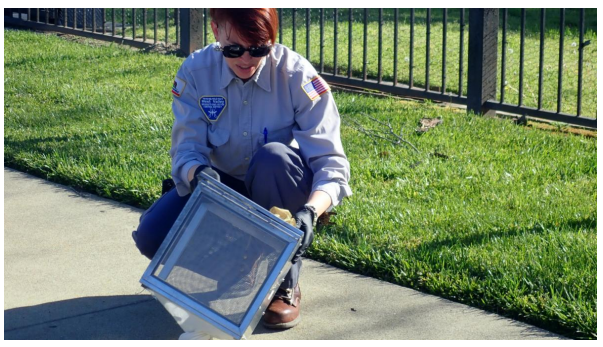
Our Technician inspects an unmaintained pool.

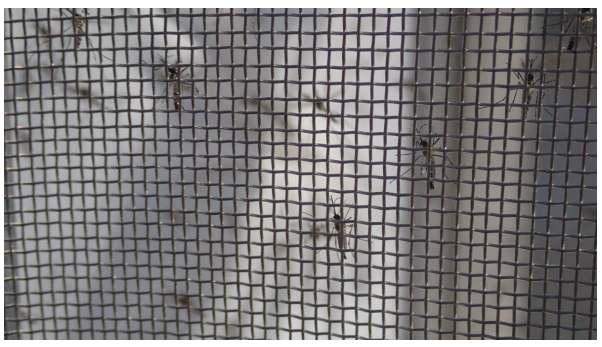
## Leading the State in S.I.T.

The District is the first in California to actively add the release of sterilized male *Aedes aegypti* into its routine operations. But why release more mosquitoes into the environment you might be asking yourself?

Sterile Insect Technique (S.I.T.) is the process of sterilizing males of an insect species and releasing them to mate with "wild" females. There are several S.I.T. methods emerging for mosquito control, but the District has chosen X-Ray irradiation as the preferred method for our purposes. X-Ray is a proven technology. It is also fast, safe and effective. We collect larvae locally and rear them in our labs, separate out the males, sterilize them through irradiation, and release them into areas with known high mosquito populations. When "wild" females mate with a sterile male, her eggs become inviable, and since female mosquitoes typically mate only once in their lifetime, any eggs she lays will not hatch!

Residents will likely not even notice our mosquitoes, because male mosquitoes don't bite, the only indication that S.I.T. was performed in an area folks may notice is a steady reduction in those pesky biting females!





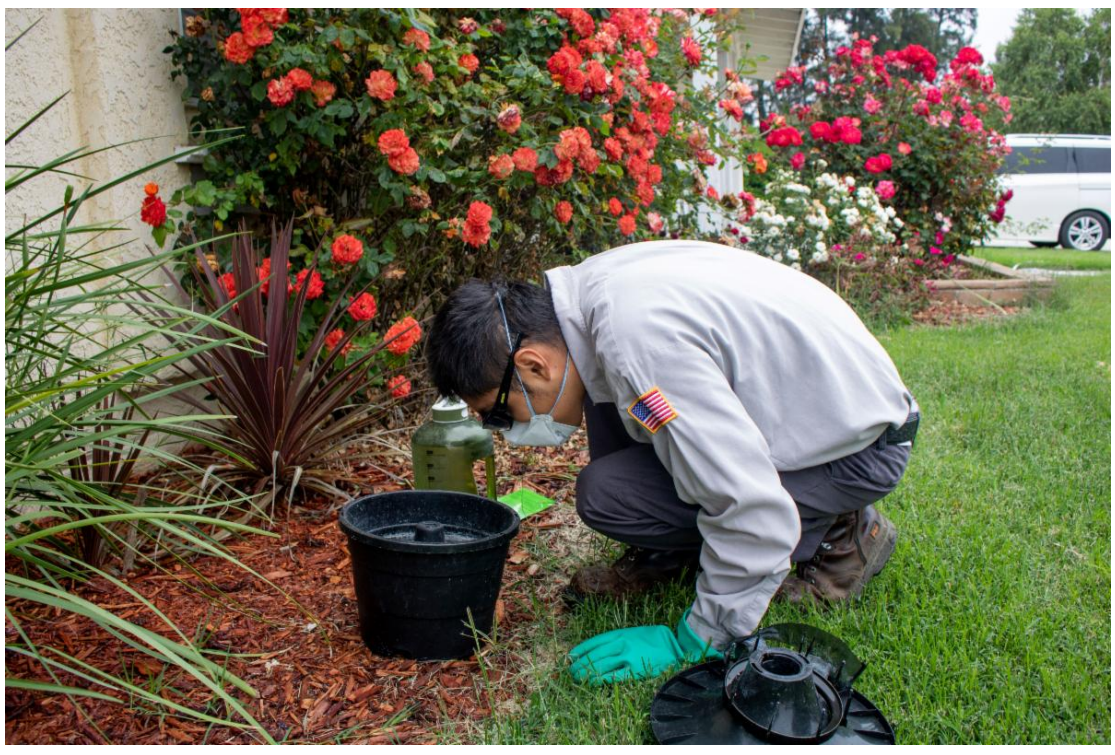
Left: Vector Ecologist releasing sterile male *Aedes*
Right: Close up of sterile males ready to be released

## In2Care Stations: Hardworking Mosquito Management Devices

In2Care Stations are an important staple to our Integrated Pest Management system, and they continue to prove their usefulness. The In2care station is an unobtrusive device about the size and shape of a flowerpot with a disk-like lid. Our technicians monitor these stations monthly to replenish materials and check they are working correctly. Despite their humble looks, they work 24-7 to suppress both our native species of mosquitoes and invasive *Aedes*.

Attract and Kill
In2Care stations work in a unique way. They are filled with water, an attractant, and two different insecticides. Egg-laying females recognize the stations as good places to deposit eggs and fly into the device. The females lay eggs inside the device and if the eggs hatch, the larvae are killed with the 1$^{st}$ of the pesticides in the water. The 2$^{nd}$ pesticide, a fungus that kills insects, is picked up by the females, and if they deposit eggs in other places, the pesticide will foul those other sources and kills the female in a couple days. If you have an In2Care station placed at your home and you notice a bunch of mosquitoes swarming the station, don't worry, that means it is working correctly, attracting only mosquitoes looking for a place to lay eggs and knocking out future generations!

Our technicians inspect properties and can determine if an In2Care station is an appropriate control method. If you are troubled by mosquitoes give us a call and we can figure out how best to help you!



A technician monitoring and replenishing an In2Care station at a residence