Protecting Wildlife Means Protecting Native Plants

By Katy Tang, Science Interchange Reporter

(This article was published in the Marin Scope Community Newspaper)

If you look around Marin County, you will see its creeks and wetlands in shapely condition thanks to the Marin County Stormwater Pollution Prevention Program (MCSTOPP). Founded in 1993, MCSTOPPP has been working in collaboration with Marin County's cities and towns, as well as those unincorporated areas whose watersheds drain into the San Francisco and San Pablo Bay.

Though the focus of MCSTOPPP is to reduce storm water pollution in order to protect the condition of creeks and wetlands, another one of its ongoing projects is to encourage the growth of native riparian, or creek-side vegetation. Riparian plant communities are vital to wildlife, but "they're probably one of the most endangered plant communities in California," according to Liz Lewis, the Creek and Stormwater Program Manager of MCSTOPPP.

One of the most important things for the animals living in the creeks is the plants growing next to them, thus plant diversity affects the number of wildlife species that dwell around creeks and wetlands. But once non-native plants inhabit the area, "the genetic diversity of the plant diversity that's there is reduced," Lewis said.

Once the plant diversity is reduced, wildlife diversity also witnesses a decrease because the ecosystem's natural structure is altered and the plantation effect of one plant species in turn affects everything from the insect population and beyond.

In addition, trees grow alongside the creeks to provide shading, as well as provide an area for aquatic insects to complete their life cycle. But more importantly, these creek-side forests help filter the silt from runoff after a period of rain.

"When we eliminate the creek-side forests or simply have these areas of non-native plants, you're not getting the same root structure and the same filtration capacity because you don't have the diversity of trees and smaller herbaceous plants," Lewis said.

Lewis also explained how these non-native plants are introduced to the environment in the first place.

"Someone brings them from wherever and they introduce them through their backyard, and they think, 'Hey, this will be great,' and it takes over." In fact, non-native species such as Ivy can be planted with just one cutting and does not take long for it to envelope the entire yard.

"It's cheap, it's fast, it covers a large area and then it just escapes from one creek backyard to the next," Lewis continued. "Then 34 years later you've got thousands of feet of Ivy or even miles in some places."

Presently, if someone living along a creek decided to introduce non-native species into the environment, there would be no recourse. That is why MCSTOPPP has a public outreach and education program, as well as native plant information on its website. MCSTOPPP also offers help with revegetation efforts, and can help people decide which plants to use, where to plant them and teach people how to care for them.

And most importantly, MCSTOPPP encourages people to be aware of the significant effects of their daily and cumulative actions.

“I think that people need to think about the fact that if they’re living along a creek, they’re really part of a larger watershed,” Lewis said. “Even though their property may only front 50 feet of a creek that’s five miles long, there may be a thousand landowners all fronting up to that creek. And if we could get a community effort where everyone was promoting native plants or trying to incorporate native plants into the landscape, that landscape would be just that much richer for our native bird population, fish population, insects, and so on down the line.”

RESOURCES:

Marin County Stormwater Pollution Prevention Program to view a list and pictures of native riparian plants, and to join a Creek Care group: www.mcstoppp.org

For additional information about native plant communities in Marin Country: www.marin.cc.ca.us/cnps/communities.html