

San Francisco Department of the Environment Factsheet
**California Red-Legged Frog (CRLF), *Rana aurora draytonii*,
Stipulated-Injunction Regarding Pesticide Use in Critical Habitat**

Reference US-EPA website: <http://www.epa.gov/espp/litstatus/redleg-frog/rif.htm>
Updated 1/1/09

Legal Action & the Stipulated Injunction

On April 2, 2002 the Center for Biological Diversity filed a lawsuit against the EPA for violating the Endangered Species Act by failing to ensure that EPA's registration of 66 pesticides do not adversely affect the California red-legged frog (a threatened species native to California).



California Red-Legged Frog, *Rana aurora draytonii*, note the characteristic red skin fold (arrow) running from the eyes to the tail. Photo courtesy of www.californiaherps.com

To resolve the case, on October 20, 2006 the Courts issued a Stipulated Injunction. It requires EPA to determine the effects of 66 pesticide AIs (Active Ingredients) on the California Red-Legged Frog (CRLF) and to amend the labels and use restrictions based on their findings. The US-EPA has 36 months to evaluate all 66 of the AIs.

In the interim, restrictions are in place on the use of products containing the 66 AIs.

The injunction can be viewed at:

<http://www.epa.gov/espp/litstatus/stipulated-injunction.pdf>

Affected Areas:

This ruling affects areas in 32 California Counties, including San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, and counties containing SF rights-of-way up to Hetch-Hetchy Reservoir. Detailed county maps can be found on-line at:

<http://www.epa.gov/espp/litstatus/redleg-frog/steps-info.htm> (Click on the County of interest)

How Does This Affect You?

If you plan to use one of the 66 AIs listed at the end of this factsheet, visit the map link above to see if your site is located in either critical or non-critical habitat. If it is, here is a summary of how your applications are affected (restrictions are the same for critical and non-critical habitat).

- All still or slow-moving fresh-waterbodies in affected areas – natural and man-made, permanent and temporary – are considered habitat and are subject to the restrictions.
- Ground Applications: Do not apply products with listed AIs in the water, in the 200-foot upland habitat surrounding the water, or in the 60-foot buffer zone around the upland habitat. That amounts to a **260-foot zone around any water body in affected areas**. Aerial applications: observe a 200-ft buffer around the 200-ft upland habitat area.
- Upland habitat includes all areas within 200 feet of the mean high water mark where the frog can find shelter, refuge from predators, or rest, and includes rocks, organic debris, small mammal burrows, moist leaf litter or manmade features.
- Your application is subject to a **reduced buffer zone of only 60 feet** (200 foot upland habitat zone does not apply) for the following uses: Localized spot treatments using handheld devices on rights-of-way, roadsides, **pastures, lawns, or forests**; spot treatments of wasp and hornet nests; individual tree removal using cut stump applications; basal bark application to individual plants; use of pesticides in bait stations.

Products Affected for San Francisco Staff:

Pesticides in the injunction that are on the SF Reduced Risk Pesticide List are those containing glyphosate (Roundup & Rodeo®), imazapyr (Habitat®) and triclopyr (Turflon Ester® & Garlon 4®). Methoprene (Zoecon Altosid products) is no longer covered by this injunction; the USEPA has determined that it has no effect on red-legged frog populations. The Reduced-Risk Pesticide List limits pesticide use only on properties of the City & County of San Francisco.

Exceptions:

This injunction does not apply to public-entity-administered vector control programs.

It does not apply to the control of state-designated invasive species or noxious weeds if:

- You are applying for a public entity program
- Application is at least 15 feet from waterbodies described above
- Application is limited to localized spot treatments with a hand-held device
- No precipitation is forecast within 24 hours
- You are a certified applicator or under the direct supervision of a certified applicator

View USDA's Calif. invasive & noxious plant list:

<http://plants.usda.gov/java/noxious?rptType=State&statefips=06TH>

View CDFA's weed list:

http://www.cdfa.ca.gov/phpps/ipc/noxweedinfo/noxweedinfo_hp.htm#

The injunction also does not apply to indoor applications, tree injection applications, home-owner applications to potted plants, flea & tick collars for dogs and cats, where use is approved under the Endangered Species Act.

Biology of the California Red-Legged Frog

The CRLF is the largest native frog in California. It is highly aquatic and is usually found in streams, ponds, coastal drainages and their adjacent habitat. The frog will make use of cool moist burrows, leaf litter, and other land retreats to keep cool and to avoid dehydration, especially in the summer. In cooler inland areas burrows are used for hibernation.

CRLF can reach over 5 inches long and is brown to reddish-brown above with irregular black spots (sometimes with light centers). Prominent skin folds along both sides run from the eyes to the tail. The undersides of their legs, and sometimes the abdomen, are red in adults (red color may not be well developed in juveniles). CRLF is distinguished from the bullfrog by its lack of green color, characteristic of the bullfrog.

The CRLF is active in coastal areas all year. During their tadpole stage they eat algae. Adults typically eat land invertebrates (insects, etc.) but larger frogs will prey on the Pacific tree frog (*Hyla regilla*) and on California mice (*Peromyscus californicus*). Feeding occurs largely along the shoreline and on the water surface.

Breeding occurs November through March, varying throughout their range. Egg-laying usually occurs in late winter or early spring, often following a heavy rain. The female deposits her 2,000- to 5,000-egg masses on newly emerged aquatic

vegetation near the surface of the water. Eggs hatch in 6 to 14 days. The tadpoles undergo metamorphosis at 3 ½ to 7 months after hatching and reach sexual maturity at 3 to 4 years old. The frogs generally live from 8 to 10 years.

Pesticides Banned in Habitat Areas-Full List

The 66 pesticides cited in the injunction are:

2,4-D (broadleaf herbicide), Acephate (Orthene®), Alachlor, Aldicarb, Atrazine, Azinphos-methyl, Bensulide, Bromacil, Captan, Carbaryl (Sevin®), Chloropicrin, Chlorothalonil (Daconil®), Chlorpyrifos (Dursban®), CDPA, DEF, Diazinon, Dicofol, Diflubenzuron, Dimethoate, Disulfoton, Diuron, Endosulfan, EPTC, Esfenvalerate, Fenamiphos,



CRLF egg masses in Alameda County.

Photo courtesy of www.californiaherps.com

Glyphosate (Roundup®, Rodeo®), Hexazinone, Imazapyr, Iprodione, Linuron, Malathion, Mancozeb, Maneb, Metam Sodium, Methamidophos, Methidathion, Methomyl, Methoprene, Methyl Parathion, Metolachlor, Molinate, Myclobutanil, Naled, Norflurazon, Oryzalin (Surflan®), Oxamyl, Oxydemeton-methyl, Oxyfluorfen, Paraquat dichloride, Pendimethalin, Permethrin, Phorate, Phosmet, Prometryn, Pronamide, Propanil, Propargite, Rotenone, Simazine, Strychnine, Telone, Thiobencarb, Triclopyr (Garlon 4®, Turflon Ester®), Trifluralin (Treflan®), Vinclozolin, and Ziram.

NOTE: Some of these active ingredients (notably methoprene) have since been determined to have “no effect” on frog populations, and pending consultation with the USFWS are expected to be no longer subject to the injunction’s restrictions. See the “effects determinations” for details:

<http://www.epa.gov/espp/litstatus/effects/redleg-frog/index.html>