

## Failure to Regulate: Pesticide Data Fraud Comes Home to Roost



The California red-legged frog. More than 70 percent of its population has died out since 1996. (Photo: California red-legged frog via Shutterstock; Edited: LW / TO)

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By Carol Van Strum, Truthout | News Analysis

The US Environmental Protection Agency (EPA) can hardly be surprised by news that Roundup and other best-selling pesticides cause cancer. The EPA originally registered atrazine, Roundup (glyphosate), 2,4-D and hundreds of other poisons based on fraudulent or nonexistent industry safety studies, their real effects concealed by the EPA and industry for 50 years. Now the fraud and lies are coming home to roost.

The news is unlikely to prompt the EPA to ban Roundup or any other toxin, though.

“The agency has a very poor track record in protecting us from dangerous chemicals,” says Dr. Brian Moench. “In fact, in 2013, well after much of the alarming research on glyphosate had already surfaced, the EPA actually increased the ‘acceptable’ levels of glyphosate contamination of numerous foods, anywhere from twice for soybeans to 25 times higher for carrots.” Pesticides have been linked to the alarming decline of amphibians throughout the planet.

What the EPA can hide under an industry-crafted pesticide law, however, it can be forced to reveal under the Endangered Species Act. A vanishing West Coast frog, already better protected from pesticides than humans are, may undo decades of EPA and industry cover-ups through court-ordered review of long-secret toxicity studies.

Best known as Mark Twain's "Celebrated Jumping Frog of Calaveras County," the California red-legged frog (*Rana draytonii*) is California's largest native frog and official state amphibian. It also is one of the very few freshwater species known to sing love songs underwater.

With so much going for it, *Rana draytonii* nevertheless is in serious trouble. Ninety percent of its population has died out, more than 70 percent of its habitat has been destroyed, and since 1996, it has been listed as a gravely threatened species. Just over the state line in Oregon, however, its close cousin the northern red-legged frog (*Rana aurora*) - also a prodigious jumper given to underwater serenades - is by comparison thriving, its conservation status listed as "of least concern."

The difference between the fates of the two frogs is generally attributed to California's more extensive habitat destruction. According to a US Fish and Wildlife Service report, however, the most significant factor is the more than 200 million pounds of pesticide active ingredients applied in California every year (compared to some 13.4 million pounds used in Oregon annually, though Oregon's reporting system is notoriously less accurate than California's). Most of that 200 million pounds, plus many more million pounds of unidentified dangerous toxic "inert" ingredients, ultimately ends up in the state's waterways, including critical habitat for *Rana draytonii*.

### Amphibians Are Pesticide Canaries

Pesticides have been linked to the alarming decline of amphibians throughout the planet. Amphibians, which live in water much of their lives and breathe through their perme-

able skin, are particularly susceptible to poisons in the water; frog eggs float on or near the water surface, where pesticides drift and accumulate, and their tadpoles live exclusively in water, extremely vulnerable to pesticide contamination for five to seven months or longer before metamorphosing into adult frogs. Worldwide, multiple studies have linked pesticide exposure to malformed tadpoles, reversal of sexes, hermaphroditism, infertility, immune system damage, embryo death and other effects in frogs.

The EPA has been routinely lying about the safety of pesticides since it took over pesticide registrations in 1970.

In 2006, US District Judge Jeffrey S. White, in a lawsuit brought by the nonprofit Center for Biological Diversity, approved a settlement prohibiting all uses of 66 harmful pesticides in or near California red-legged frog habitat until the EPA and US Fish and Wildlife Service analyze data on their effects. The banned pesticides include 2,4-D, atrazine, glyphosate, malathion and other common products. To date, EPA reviews and consultations have barely begun, and the EPA continues to register pesticides without considering effects on endangered or threatened wildlife. Early this year, it approved a new insecticide, flupyradifurone, pronouncing it "safe" for bees. However, the Center for Biological Diversity said the EPA's own studies showed the chemical to be highly toxic to honeybees.

### An Abbreviated History of Fraud and Lies at the EPA

The EPA has been routinely lying about the safety of pesticides ever since it took over pesticide registrations from the US Department of Agriculture in 1970. This is perhaps

inevitable. Ensuring the “safety” of chemicals designed to kill living things is no more feasible than ensuring the safety of guns, but unlike guns, the damage done by pesticides can take weeks, months or even decades to become manifest, presenting endless opportunities for fraud, lies and cover-ups.

Glyphosate and many of the 66 products banned on California red-legged frog habitat are still on the market today.

Within the first decade of the EPA’s existence, it became obvious that nearly all the “safety” tests supporting pesticide registrations were faked, with either fraudulent or nonexistent data. The massive lab fraud uncovered at Industrial Bio-Test Laboratories (IBT) revealed that 99 percent of long-term studies (for cancer, birth defects, mutagenicity, reproductive damage etc.) supporting some 483 pesticide registrations were invalid.

For 25 years, in what US Food and Drug Administration (FDA) officials called “the most massive scientific fraud ever committed in the United States, and perhaps the world,” all major chemical and pharmaceutical companies had paid IBT to produce the test data they needed to register their products. All but forgotten now, the IBT fraud shook the chemical and pharmaceutical industries and regulatory agencies around the world. In 1983, a six-month-long criminal trial resulted in the convictions of three IBT officials. The trial revealed a vast, lucrative business of deceptive safety testing:

- New animals routinely substituted - often en masse - for test animals that died, without noting deaths or substitutions in lab reports;

- Entire test data and lab reports for one test product copied into reports for other products;

- “Magic pencil” studies substituted false data for tests never done or results implicating test products’ adverse or fatal effects;

- Signatures of lab techs who had refused to sign false reports were forged by managers on the false reports;

- Rats listed as dead and autopsied in one section of a report reappeared alive and breeding in another section of the same report (“Now IBT did some strange and unusual things,” Dr. Adrian Gross, who first revealed the IBT scandal, remarked, “but bringing back the dead wasn’t one of them.”);

- Substitution of unexposed control animals for test animals that died;

- Substitution of dogs for rats when all the rats in one test died, then reporting them to be rats;

- Wholesale concealment and falsification of cancers, testicular atrophy, death and other effects in test animals;

- A laboratory that IBT scientists called “The Swamp,” with a faulty water system that drenched the entire room, cages, rodents and all, in a continuous spray of water, drowning the test animals in droves. “Dead rats and mice, technicians later told federal investigators, decomposed so rapidly in the Swamp that their bodies oozed through wire cage bottoms and lay in purple puddles on the dropping trays.”

· Massive, frequent die-offs of test animals due to staff failing to feed and water them over holidays, rodents dying from unhygienic conditions, rats dying from rat poison fed them by mistake, rodents escaping, rats and mice being shifted from one cage to another, contaminating and eating each other; frequent “search and destroy” hunts for escaped rodents, with scientists and lab techs dashing about squirting chloroform to “slow down” the escapees, often killing the test animals as well;

· After Gross’ first visit to IBT in 1976 and before he could return with auditors, the company equipped its offices with paper shredders and “strip filed” huge volumes of raw data, studies and client lists, including all of its studies on 2,4-D, six other herbicides (never identified), artificial sweeteners, cyclamates and plastics components.

Almost all of the products tested by IBT, including 2,4-D, glyphosate, atrazine and many of the 66 products banned on California red-legged frog habitat, are still on the market today.

IBT, it turned out, was but the tip of a huge iceberg. Subsequent audits of 82 other testing laboratories found that more than half - 47 labs - had serious “deficiencies,” including some 22 labs that had destroyed all lab reports and raw data, making audits impossible and conclusions unsupported. Peter von Stackelberg, a reporter for the Regina, Saskatchewan Leader-Post, was the first to expose the true extent of what the EPA called mere “deficiencies” in those other labs:

The kinds of things they found were IBT all over again. Rats listed as “dead” were also listed as having been mated at the same time.

Rats were listed as having died twice. There were autopsy records for test animals that were still alive, and EPA found that tumors and other adverse effects were “under-reported.” (1)

Ever since publication of von Stackelberg’s articles in 1980, however, the EPA has refused to disclose which pesticides had been tested by these other labs, and to this day, no one knows or is telling. Nor was any pesticide registration canceled on the basis of fraudulent, invalid or “deficient” testing. Instead, the EPA and industry maneuvered Congress into changing the pesticide law to allow registrations based on such false data to continue indefinitely as “conditional registrations” until manufacturers submitted replacements for the “deficient” tests, which could take many years. (For example, more than eight years after discovering the IBT fraud, the EPA continued to allow atrazine sales despite the manufacturer’s repeated failure to replace IBT’s fraudulent tests. (2) As noted below, the EPA’s subsequent policy changes prevent any public scrutiny of what tests, if any, or their validity, support current atrazine registrations.)

Under another amendment to the same law, pesticides could be granted a “minor use exemption” from any testing requirements for uses in “unpopulated” areas like farms, recreation areas, national forests and rural communities.

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“The concept of conditional registration is that you don’t look at all the data base when you make the decision on the conditionality,” Fred T. Arnold, chief of the EPA’s regulatory



analysis and lab audits, told industry representatives at a 1978 meeting to discuss IBT data. “The concept was to try and proceed in an orderly fashion and fill data gaps and not interfere with the ability to control pests and market pesticides,” Arnold assured pesticide manufacturers. (3)

The EPA has kept this promise not to interfere with the marketing of pesticides. Unchecked by any oversight from one administration to the next, EPA pesticide registrations became rubber-stamp approvals through a series of policy decisions that precluded any unbiased validation of safety test data:

- The EPA refused to prosecute fraud in the 47 laboratories generating faked or “deficient” data; some of these labs are still operating today;

- Instead, the EPA accepted only industry summaries of alleged safety studies and stopped requiring companies to submit raw data and lab reports;

- The EPA outsourced its own reviews of those summaries to “independent” consultants often funded by the pesticide industry;

- The EPA thus began approving pesticide registrations without any scrutiny of the raw test data;

- In direct violation of the pesticide law, the EPA allows companies to declare all submissions “confidential business information,” exempt from public access under the Freedom of Information Act, precluding any outside or unbiased review;

- The EPA closed all of its own data libraries nationwide, ditching countless toxicity studies and data that could have damning evidence of fraud, negligence and collusion with industry; (4)

- Most insidiously of all, the EPA took extraordinary measures against staff scientists who questioned this rubber-stamp process. Dr. Adrian Gross, who had uncovered the IBT fraud and numerous other deceptions, as well as indications of collusion with certain EPA managers, (5) was summarily relegated to an isolated office with no further access to pesticide data and paid to do nothing.

The result of the EPA’s post-IBT “don’t ask, don’t tell” policies is that “Most chemicals enter the market without testing,” says former EPA scientist Evaggelos Vallianatos. Further, he emphasizes, “EPA’s perverse definition of inerts conveniently covers-up science and enables [uses] of chemicals that, together, are many times more deleterious than the ‘tested’ ‘active’ ingredient...”

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Thus EPA collusion and lies have enabled the pesticide industry to become too big to regulate or even try to control. And thus billions of pounds of pesticides have been sprayed every year onto US soil, water, air and food without any oversight or honest scrutiny of their individual effects, to say nothing of combined or synergistic effects.

Ironically, should the EPA ever comply with federal court orders to examine and analyze actual data on pesticide effects, our best chance to learn of and prevent those effects may rest with Mark Twain’s celebrated jumping frog.

## Footnotes:

1. Van Strum, Carol, *A Bitter Fog: herbicides and human rights*, 1983, 2014, Chapter 12; appendices 2014 edition.
2. Gary J. Burin, EPA Toxicology Branch, memos of 12/22/82 and 01/21/83 to Anne Barton, Deputy Director, and John W. Melone, Director, EPA Hazard Evaluation Division, re: Validation of Additional IBT Studies: Atrazine Mouse Oncogenicity and Rat Chronic Oral Toxicity
3. US EPA “Industrial Bio-Test Laboratories, Inc. Audit Meeting,” 1978. Transcript of EPA-Industry-Health Protection Branch Canada meeting at Howard Johnson Motor Inn, Arlington, Virginia, October 3, 1978.
4. Vallianatos, Evaggelos, *Poison Spring: The Secret History of Pollution and the EPA*, 2014, pp. 198-199.
5. M. Adrian Gross, EPA Senior Science Advisor, May 7, 1982 memo to John Melone, Acting Director Hazard Evaluation Division, re: Summary of Chronic and Oncogenic Effects of Permethrin, charging Melone with rejecting information that “might conflict or collide with the interests of the regulated industry and of the users of this particular pesticide.” M. Adrian Gross, August 1, 1983 memo to Douglas D. Campt, Director, Registration Division, Re: Safety of Permethrin; see also Adrian Gross, March 20, 1985 memo to Kevin Kearney, EPA Office of Pesticide Programs, re: Oxamyl citing EPA consultant report on EPA “cut and paste” review of registrant’s summary on malathion.