

Studies of wildlife needed

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May 31, 2017

According to U.S. Fish & Wildlife Service (FWS), the primary focus of the Rocky Flats National Wildlife Refuge is wildlife-related activities. But I know of only one study of wildlife at the Refuge. In December 2002 tissues from the bodies of 26 deer containing plutonium, americium and uranium were studied by specialists from FWS. The purpose of their study was to “define human risk associated with ingesting these tissues.”¹ Rather than looking at possible harm to wildlife they looked at possible harm to humans. Studies are needed to show the effects on wildlife at the Refuge of exposure to plutonium and other toxins.

Diethard Tautz said in an article published in 2000 that genetic effects of radiation exposure on a given species of wildlife may not show up until generations later, when harm is irreversible.² Ecologist Shawn Smallwood found that no study of genetic effects on wildlife at Rocky Flats has been done.³ Hermann Muller received the 1946 Nobel Prize in medicine for his discovery of genetic mutations in fruit flies exposed to radiation. In 1964 he published an article on the genetic effects of radiation exposure on humans. His conclusion was the same as Tautz’s, that the effects of radiation exposure may not show up for several generations.⁴

Fish & Wildlife should provide for a full genetic study at Rocky Flats of deer, elk, foxes, rabbits, prairie dogs, earthworms and other creatures. Because any harm to wildlife at Rocky Flats will not be confined to the bounds of the site, it would be helpful for Fish & Wildlife personnel to know what effect the Rocky Flats environment has on them. Doing a genetic study will give all of us a better sense of what humans and wildlife face at the Refuge. What I propose should be included in an Environmental Impact Study for the Refuge.

¹ Andrew Todd and Mark Sattelberg, “Actinides in Deer Tissues at the Rocky Flats Environmental Technology Site.” For the full report, see <http://rockyflats.fws.gov>.

² Diethard Tautz, “Genetic Uncertainty Problem,” *Trends in Genetics*, vol. 16, November 2000, pp. 475-477.

³ Shawn Smallwood et al., “Animal Burrowing Attributes Affecting Hazardous Waste Management,” *Environmental Management*, vol. 22, no. 6, 1998, p. 834.

⁴ Hermann J. Muller, “Radiation and Heredity,” *American Journal of Public Health and the Nation’s Health*, vol. 54, January 1964.