Figure 8.11: The Preble’s Meadow Jumping Mouse, listed among the Endangered Species, resides in the Rocky Flats National Wildlife Refuge.

Figure 8.12: Among the many wildlife that visit the Rocky Flats Wildlife Refuge are elk.

Genetic specialist Diethard Tautz says that effects of radiation exposure on a given species of wildlife may not be readily apparent in individuals of that species until the passage of several generations. He calls this a “genetic uncertainty problem.”17 This finding suggests that wildlife at Rocky Flats could in the long-term be hurt by conditions at the site, but they are not being watched closely enough for us to know (see Figure 8.13).

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Figure 8:13: This image, conceived by John Farrell and designed by Stephanie McMillan, is a good reminder that no genetic studies of wildlife have been done at Rocky Flats. The image was originally made for T-shirts available from Rocky Flats Nuclear Guardianship.

**Humans at the Refuge:** As noted above, FWS plans to allow public access to the Refuge as soon as it has the funds to build the infrastructure of entries and trails. A March 25, 2015, memo from the Rocky Flats Stewardship Council stated that DOE and FWS “are in the early stages of planning a Rocky Flats visitor center. The visitor center will most likely be located on the Rocky Flats National Wildlife Refuge, and will serve both federal agencies.” The Visitor Center, apparently to be funded by DOE, is a step toward opening the Refuge to the public. This must not happen, because of the plutonium contamination that remains in soil both at the Refuge and at the 1,309 acres of DOE-retained land that the Refuge surrounds (see Figure 8.14).
Figure 8.14. The 2015 map shows land that was recently added to the Rocky Flats National Wildlife Refuge. The Refuge now includes the green and red parcels on this map, an area of 9.75 square miles. The Refuge surrounds a plot of 1,309 acres (about 2.05 square miles) retained by the DOE. The DOE land remains on the Superfund list of contaminated sites. The Refuge was removed from the Superfund list when the cleanup was finished.

Congress in 2000 passed legislation to compensate workers whose health was harmed by workplace exposures at Rocky Flats and other DOE nuclear weapons sites. Congress needs to show the same level of care for the wholly innocent unknowing individuals whose health may be harmed if they visit the Rocky Flats National Wildlife Refuge. Potential visitors to the Refuge differ from former Rocky Flats workers in several respects.

- They will not be informed that being at Rocky Flats poses a risk.
- No special measures will be taken to protect them; they will not wear radiation detection equipment as was required of many nuclear workers.
- No record will be kept of their possible exposures.
- Their future health will not be monitored.
- If their health is harmed due to exposure to plutonium or other toxins at Rocky Flats, the source of the problem almost certainly will remain unknown.
- The government will not provide medical care or compensation for their ill fortune.

If public access occurs at the Rocky Flats Wildlife Refuge, FWS will welcome children. Of all potential visitors to the Refuge, a human child is the most vulnerable. Consider:

- A child is more likely than an adult to stir up dust, to eat dirt, to breathe in gasps, or to scrape a knee or an elbow, all ways of taking particles of plutonium into the body.
- Since a child's body is smaller than an adult's, internalized plutonium has much less mass in which to be distributed or to concentrate.
- The alpha radiation emitted within a child's body integrates with that child's growth and tissue development.
- By contrast to either adult humans or other beings, a child's normal life span provides far more time for internalized alpha radiation to harm her or his health.
• U.S. Fish & Wildlife and the Rocky Flats National Wildlife Refuge will disappear long before plutonium in the site environment ceases to be radioactive. It is thus likely after fences fall and memory fades that families with children will live on the site without any knowledge of the invisible danger they face (see Figure 8.15).

On behalf of our own children and of our grandchildren’s children, the Rocky Flats National Wildlife Refuge must never be opened to the public.

Congress should pass legislation requiring that after cleanup at a DOE Superfund site, such as Rocky Flats, the site will be designated open space that is closed to the public for not less than 250 years, during which time it will be monitored for toxins and radionuclides in the environment in tandem with ongoing research on human health effects of exposure to said toxins and radionuclides and establishment of standards for protection of those exposed.  

In the words of Terry Tempest Williams, “The eyes of the future are looking back at us, and they are praying for us to see beyond our own time.”

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Figure 8.15: Gabriel, grandson of my colleague, Judith Mohling. If the flower he has in his mouth came from Rocky Flats, it could be dusted with plutonium that he could inhale or otherwise take into his young body.

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