Nuclear power kills wildlife and destroys ecosystems

The construction and operation of nuclear power plants harms wildlife, threatens endangered species and destroys ecosystems on which these animals depend.

Nuclear power plants consume water — and the living creatures in it
Nuclear power reactors using the once-through cooling system (no cooling towers) draw in as much as a million gallons of water a minute to cool the reactor. The superheated water is then discharged back into the same body of water from which it was drawn.

Nuclear power plants suck in small marine animals and aquatic life indiscriminately
Nuclear plants are not required to have a "fishing license". As water is drawn into the plant at high velocity, tiny creatures including fish, fingerling, spawn and other small aquatic creatures, are drawn indiscriminately into the plant where they are destroyed and then discharged as sediment.

Larger marine animals are also trapped and injured at nuclear power plants
Seals, sea turtles, and manatees have been routinely harmed and even killed by these powerful water intake systems, becoming trapped and harmed during entrainment. The UK Seal Conservation Society successfully intervened to insist nuclear stations installed seal excluders or "grills" to prevent this.

Coolant water is discharged as hotter water, altering the marine environment
Inside the reactor, the coolant water heats up. When it is discharged, it warms the immediate aquatic environment, altering the local ecosystem by driving away indigenous species and, in some cases, harming species such as black abalone that were accustomed to the previously cooler water. The artificially warmed water attracts animals like manatees who can then suffer or even die from cold shock when the reactor shuts for refueling and colder seas return.

Discharge water clouds the environment, impacting plant reproduction
Aquatic plants can fail to thrive due to nuclear reactor operations. Discharge water clouded by pulverized fish and spawn blocks sunlight and the ability of underwater plants to photosynthesize. Because the water is discharged at velocity, it also stirs up sediment, further clouding the water. Photos have shown underwater plant life virtually "clear cut" and scoured down to bare rock at nuclear plant discharge points.

Destruction of nature and habitat around Sizewell
The protected Minsmere nature reserve, adjacent to the proposed Sizewell C reactor site in Suffolk, is home to more than 5,600 different animals, plants and fungi including the bittern, marsh harrier and otter. But, according to the Royal Society for the Protection of Birds, the new reactor could increase coastal erosion, destroy wetland habitat, alter water availability for wildlife and drive sensitive species away due to noisy and destructive heavy transport and construction activities.

Protected and migratory birds under threat at UK nuclear sites
The now halted Wylfa B reactor site in North Wales is adjacent to Cemlyn nature reserve. Construction and long-term operation of Wylfa B would have damaged the reserve's shingle ridge, saline lagoon and breeding tern colony. At the Hinkley-C nuclear site in Somerset, at least 68% of the Hinkley County Wildlife Site has already been lost to construction, disturbing feeding, roosting and migratory birds. Similar wildlife risks exist at the proposed Bradwell nuclear site in Essex.

All nuclear reactors both routinely and accidentally release radioactive gases and liquids
The radioactive liquids and gases released by nuclear reactors expose marine and terrestrial wildlife to radiation. Studies on such harm due to these exposures are scant, but many organisms, including fish, are know to be sensitive to radioactive emissions. After a nuclear accident, mammals and birds have shown genetic and neurological damage, reduced fertility, tumors and cataracts due to long-term exposure to "low" doses of radiation. One cannot assume that no harm will come to animals routinely exposed to ionizing radiation.

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www.BeyondNuclear.org; info@beyondnuclear.org; 301.270.2209