

Setting the Stage for Bald Eagle Recovery

All living things, including humans, are connected to each other in a “web of life.” When we remove anything in nature, something else is affected. It has been estimated that a disappearing plant can take with it up to 30 other species, including insects, other plants, and higher animals. Endangered species are the fire alarms telling us that the living things being affected include us.

The bald eagle set off a fire alarm for the American public when we learned why it had become endangered in the lower 48 states. Because of the use of a dangerous pesticide called DDT, bald eagles plummeted towards the brink of extinction.

For years after World War II, the government sprayed DDT (dichloro-diphenyl-trichloroethane) to control mosquitoes in coastal areas, and farmers used DDT to control agricultural pests. When it rained, DDT would wash off the soil and into the waterways. There, it was absorbed by aquatic plants and animals. Fish ate the plants and animals, and then eagles ate the fish.

When DDT broke down, the primary product, DDE, built up in the fatty tissues of female eagles, preventing the formulation of calcium release necessary to produce strong eggshells. Consequently, eggshells were thin and cracked when an adult tried to incubate the eggs. Widespread reproductive failure followed, causing the eagle population to plunge.

During the 1940s, 1950s, and 1960s, approximately 675,000 tons of DDT were applied to U.S. soil. The peak year for use in the United States was 1959 – nearly 80 million pounds were applied. Responding to the eagle population decline nationwide, the Secretary of the Interior listed the bald eagles south of the 40th parallel as endangered on March 11, 1967 under the Endangered Species Preservation Act of 1966. However, the decline continued.

Rachel Carson, biologist and writer, had long been aware of the dangers of chemical pesticides but was also aware of the controversy within the agricultural community, which needed such pesticides to support crop production. She had long hoped someone else would publish an exposé on DDT but realized finally that only she had the background as well as the economic freedom to do it.

According to the *New York Times*, “one of the sparks that caused Miss Carson to undertake the task of writing the book was a letter she had received from old friends Stuart and Olga Hutchins. It told of the destruction that aerial spraying has caused to their two-acre private sanctuary at Powder Point, in Duxbury, Mass.”

Rachel Carson made the decision to produce *Silent Spring* after years of research across the United States and Europe. When excerpts of *Silent Spring* were published in *New Yorker* magazine, Carson became the focus of a storm of controversy and suffered from numerous attacks on her professional integrity.

President Kennedy created a commission to review the government’s pesticide policy and Carson was asked to testify before a Congressional committee along with other witnesses. Not only did Congress subsequently create the Environmental Protection Agency, but as a direct result of the study, the Environmental Protection Agency banned the use of DDT on December 31, 1972.

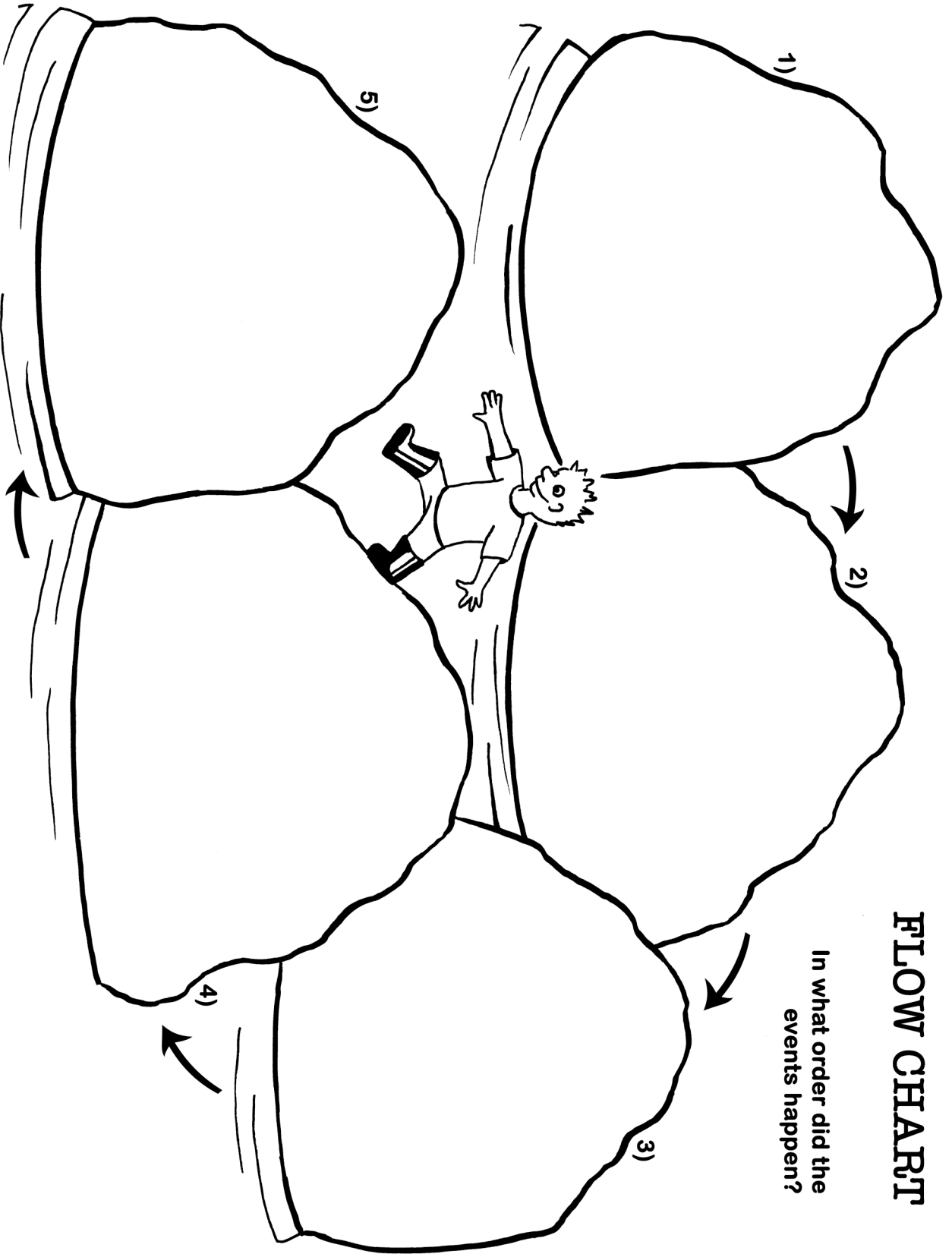
Then, the Endangered Species Act was passed in 1973, and the bald eagle was listed as an endangered species in the lower 48 states, with the exception of Minnesota, Wisconsin, Michigan, Oregon and Washington, where it was listed as a threatened species. The Endangered Species Act provided the springboard for the U.S. Fish and Wildlife Service Endangered Species Program and its partners to work together and help the eagle recover. Through captive breeding programs, reintroduction of eagles into their historic habitat, protecting nest sites during the breeding season, conserving roosting habitat for food and shelter and enforcing the law against those people who illegally killed eagles, the Endangered Species Act provided significant protection for our nation’s symbol.

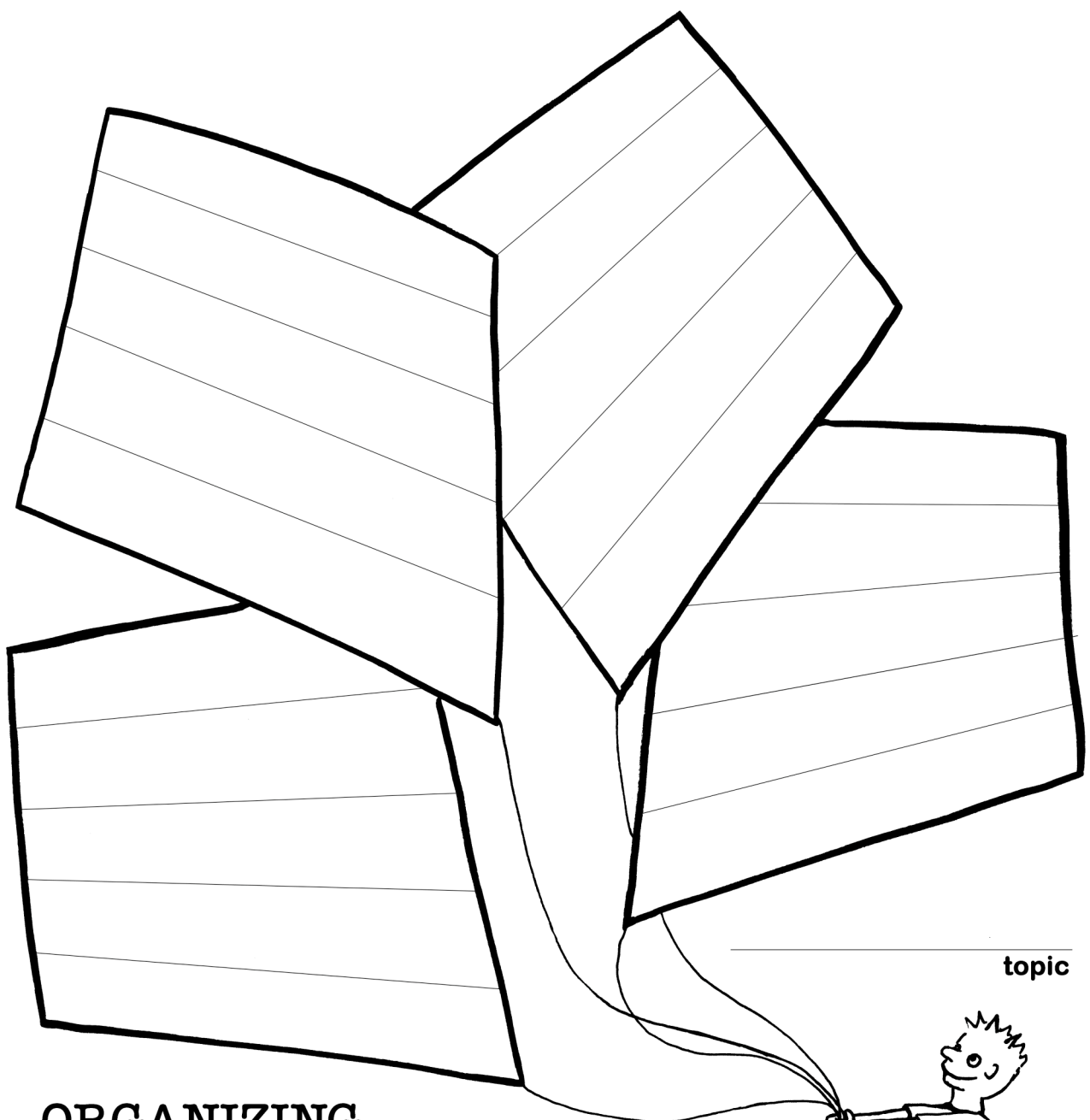
The publication of *Silent Spring*, combined with the habitat protections afforded by the Endangered Species Act set the stage for bald eagle populations to make a remarkable comeback.

**Source: U.S. Fish and Wildlife Service Division of Migratory Bird Management
<http://www.fws.gov/migratorybirds/issues/BaldEagle/KidsActivities.htm>**

FLOW CHART

In what order did the events happen?





_____ topic

ORGANIZING Details



Write the topic on the line provided.
Write details on the kites.

