

Southwest Region

The water quality in Buffalo National River is threatened by pollution from a solid waste landfill proposed nearby. This landfill also may contaminate other springs and water wells in the vicinity, which are used for local water supplies. These threats from the leachates which the landfill will generate have been substantiated by research.

The landfill site is located in a limestone karst area typical of the Ozark uplift. The Buffalo River has incised itself deeply into these limestone strata which are shot full of sinkholes and extensive cavern systems. Though the proponents of the landfill claim that a "fat" clay layer exists which can be compacted sufficiently to prevent any leakage, detailed dye-tracing studies performed over a 2-month period early this year showed that leachates will reach numerous nearby wells and springs. Two of the springs are water sources for tributaries to the Buffalo River. One of these, Mitch Hill Spring, is a major contributor of flow to the river during low flow periods. The dye showed up in this spring about 8 weeks after being injected into a sinkhole on land immediately adjacent to the proposed landfill site. The endangered grey bat forages over the river along the reach which can be contaminated.

Park management and staff along with Dr. Jim Quinlan of Mammoth Cave in Kentucky and staff of the Southwest Region's Division of Natural Resources Management have been working with the Field Solicitor to prepare for hearings to stop the landfill. This is in addition to a very aggressive effort which local citizens have mounted to resist the landfill. The entire issue has become politically charged, with gratifying support for the National Park Service's stand from the Arkansas Congressional delegation and Governor's office. Stay tuned for further updates as this fight continues to protect the beautiful Buffalo from this external threat.

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The recent "bloom" of toxic red tide organisms along the Texas coast has disappeared and is gone as quickly and unexpectedly as it appeared, leaving in its wake millions of pounds of dead fish and other marine organisms. The red tide is caused by a single celled plankton organism, and is best known for its effect in contaminating shell fish. The plankton, known as dinoflagellates, "bloom" in water more than 60 degrees fahrenheit. The demise of the recent red tide

"bloom," according to Padre Island Management Specialist Jennifer Bjork, is probably due to a decrease in temperature. A modest research effort was begun shortly after the red tide first appeared. The results of this research will be reported in *Park Science* in the future.

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Guadalupe Mountains NP reports that reintroduction efforts of the Montezuma Quail appear to be successful. Twenty chicks were observed at one time by a visitor to the park, and smaller numbers of young accompanied by their parents have been seen on other occasions.

The bird, also known as a fool or harlequin quail, disappeared from the Guadalupe Mountains decades ago, apparently because grazing livestock usurped their food supply. These little birds will be a welcome addition to the avifauna at Guadalupe Mountains National Park.

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There were 2011 Kemp's Ridley turtle eggs transported from Mexico to Padre Island National Seashore in June of 1986. Of these, 1776 hatched, for an overall hatching percentage of 88 percent. Although no NPS marked turtles have returned to nest at Padre Island, the prospects are so bright that the NPS and several other government agencies have decided to continue the process for another five years. Chief Scientist M. Fletcher promises to write a complete update for an impending issue of *Park Science*.