

more intensively, up to the filter, leads the smoker to inhale more dangerous chemicals and has been shown to cause cancer deeper into the lung,” the researchers say.

Adda and Cornaglia write that most smokers would prefer to smoke more often but less intensively because the last part of a cigarette tastes worse. Tobacco near the filter or butt has been heated up by smoke. Less frequent but more intensive smoking also produces uncomfortable nicotine highs and lows during the day.

Today, combined federal, state, and local taxes range from a high of \$4.05 a pack in Chicago to a low of 46 cents in South Carolina, and smokers are highly sensitive to price. A 10 percent increase in taxes results in an overall four percent decline in cigarette consumption—with most of the “lost” sales involving teenagers and pregnant women, specialists say. Smokers are disproportionately likely to have low or medium levels of education, and to work in unskilled

Even a one percent rise in taxes caused smokers to smoke more of the cigarette, inhaling more dangerous chemicals shown to cause lung cancer.

and manual occupations. Men and the young are more likely to smoke than women and older individuals, the authors write.

Smoking intensity also varies by race. Whites smoke about 40 percent more cigarettes per person than Hispanics and five percent more than African Americans, but blacks have the highest level of cotinine. Blacks extract 56 percent more nicotine per cigarette than Hispanics or whites, Adda and Cornaglia say. This figure helps explain the medical literature showing that even though African-American men are not the heaviest smokers, they have the highest incidence of lung cancer.

SCIENCE & TECHNOLOGY

Who Killed the Wild ‘Alalā?

THE SOURCE: “Do No Harm” by Mark Jerome Walters, in *Conservation in Practice*, Oct.–Dec. 2006.

THE ‘ALALĀ HAD DECLINED TO only a few dozen birds by the early 1970s, when biologists warned that “midnight” for the traditionally sacred creatures was near. Once common in the cloud forests of Mauna Loa, the Hawaiian raven—believed to guide the dead to the afterlife—was near extinction.

Fearing the loss of the last remaining ‘alalā, biologists captured a half-dozen to breed in captivity. Housed in understaffed and underfunded state facilities, the birds failed to reproduce. More were captured. Most grew old without leaving behind a single offspring.

Why didn’t they reproduce? Were they disappearing because of loss of nesting habitat or as a result of attacks by alien predators? Were

EXCERPT

Bill Gates Meets iPod

I pulled out the iPod and put it in front of [Bill] Gates.

“Have you seen this yet?” I asked.

Gates went into a zone that recalls those science-fiction films where a space alien, confronted with a novel object, creates some sort of force tunnel between him and the object, allowing him to suck directly into his brain all possible information about it.

Gates’s fingers, racing at NASCAR speed, played over the scroll wheel and pushed every button combination while his eyes stared fixedly at the screen. I could almost hear the giant sucking sound. Finally, after he had absorbed every nuance of the device, he handed it back to me.

“It looks like a great product,” he said. Then he paused a second. Something didn’t compute.

“It’s only for Macintosh?” he asked.

Yes, it was. (Then.)

—STEVEN LEVY, *Newsweek* senior editor and author of *The Perfect Thing: How the iPod Shuffles Culture, Commerce, and Coolness*, in *Wired* (Nov. 2006)

they weakened by exotic diseases? The rare birds were an increasingly alluring topic of research, writes Mark Jerome Walters, a University of South Florida journalism professor. Although some biologists warned that close observation of breeding pairs seemed to drive the birds from their nests, scientists believed that time was running out. Time-lapse movie cameras were installed near several remaining wild nests. But the cameras clicked loudly when they powered up. About 3,800 hours of nesting activity were filmed, but many of the pairs abandoned their nests during the study. By 1980, when the project ended, fewer than three dozen ravens were left, two dozen in the wild and nine in captivity without offspring.

By 1992 the wild 'alalā population had shrunk to 11, nine of which lived on Cynthia Salley's ranch. She refused to let the biologists in to study them. "There are only a few 'alalā left in the world," she recalled

telling them. "You've got one experiment trying to raise them in captivity. And you've got other experiments to study them in the wild. Well, I've got my own experiment going on here. It's called the 'Leave Them Alone Project.'" Environmental groups sued for access.

Meanwhile, the National Research Council, an



Today 52 Hawaiian 'alalā cling to life in captivity, survivors of state efforts to save the sacred ravens.

independent scientific group in Washington, weighed in. Leave the 'alalā in the wild, their report said. Allow qualified biologists to pluck eggs from the nests of the ravens to be hatched in new, professionally

staffed, and better-funded facilities. Within months, so many ravens had hatched that they could be returned to Mauna Loa. Initially they thrived, but soon began to succumb to disease and hawks. Twenty-one of the 27 released 'alalā were gone by 1999. Three years later, none remained alive in the wild. The

questions about their demise have never been fully answered. Today, 52 remain in captivity.

The tragedy of the 'alalā is an all-but-universal parable about endangered species, writes Walters. The "lure of technology" tips the balance toward action instead of minimizing the risk of making matters worse. Saving the ravens became a consuming mission for many biologists at the end of the last century, but harm was done by going to great lengths to do good. Sometimes, Walters says, the best policy with endangered species is one laid out by Hippocrates 2,400 years ago: First, do no harm.

ARTS & LETTERS

Eyes of the Creators

THE SOURCE: "View Masters" by Margaret S. Livingstone and Bevil R. Conway, in *Skeptical Inquirer*, Nov.-Dec. 2006.

EVEN A PARTIAL LIST READS like a Facebook of 20th-century art: Marc Chagall, Gustav Klimt, Edward Hopper, Jasper Johns, Man Ray, Frank Stella, Willem de

Kooning, Roy Lichtenstein, Andrew Wyeth, Pablo Picasso.

What unites this collection of originals is the likely diagnosis of stereoblindness—a misalignment of the eyes that prevents stereopsis. Ninety percent of the population automatically masters stereopsis, which is the ability to take

the slightly different image recorded by each eye and merge the two images into a seamless three-dimensional scene. But about 10 percent fails. Margaret S. Livingstone, a neurology professor at Harvard Medical School, and Bevil R. Conway, a junior fellow at Harvard, write that misaligned eyes of the kind that can cause torment to a child on the playground may actually be an asset for an artist.

Livingstone and Conway studied photos of 53 famous artists