

Name
Grade
Science Article
Date

The Comeback

A major conservation project has brought puffins back home to the United States.

Stephen Kress will never forget the first time he saw Atlantic puffins in the wild. The year was 1967. *Wow!* he thought at the sight of thousands of the toy-like creatures on a shoreline of the Canadian province of New Brunswick. *These birds are amazing!*

Two years later, while working as an instructor at an Audubon camp on Hog Island off the coast of Maine, Kress learned he was in a place where Atlantic puffins had flourished more than 100 years previously. Now they were all gone.

Kress knew a local treasure had been lost. He has since made it his life's work to return that treasure. His efforts have become a model for seabird conservation efforts worldwide.

Land and Sea

Atlantic puffins are short, stocky birds with black and white feathers, orange legs, orange feet, and large, triangular, orange-red beaks. An adult puffin stands only about 25 centimeters (10 inches) tall.

Atlantic puffins are “all-purpose birds,” says Kress; they live on land and at sea. On northern shores of the Atlantic Ocean, they scamper over the rocky ground and burrow like groundhogs. At sea, their abilities to drink salt water and dive more than 60 meters (200 feet) allow them to live in the open water for years at a time.

In the ocean and the air, puffins are mostly silent. On land, they growl. The noise “sounds like a chain saw,” says Kress.



Bill Coster/Alamy

In its beak a puffin parent carries fish that it will feed to its chick.

The coastal burrows that Atlantic puffins inhabit are built for breeding. Before that happens, though, a male and a female puffin go on a series of “dates,” says Kress, which may stretch out to a yearlong “engagement” of nest building.

Once they’ve mated, a puffin couple, which may remain together for life, raises one chick at a time, caring for it equally. Puffins eat fish, such as hake, herring, and sand eels, in summer and *zooplankton* (tiny marine animals) in winter. But chicks are fed mainly fish, which is higher in protein than zooplankton.



Oxford Scientific/Photo Library

A puffin emerges from the burrow that the bird and its mate dug for their family.

To feed their young, some seabirds, such as albatross and penguins, eat fish and then regurgitate the partially digested meal into the mouths of their offspring. By contrast, puffin parents provide their chicks with whole fish they've carried crosswise in their bills, sometimes five or six at a time. The most fish that a single puffin has been observed carrying is 61.

When a puffin chick matures, it heads out to sea, where it spends about two or three years before returning to land to find a mate and breed in a colony. The first nesting usually happens when the birds are about 5 years old. Puffins live to about 20 years of age, though some live to 30 or more.



AP Images

Wooden decoys like the one at right were used to lure puffins to Eastern Egg Rock island off the coast of Maine.

Relocation Effort

During his stay on Maine's Hog Island in 1969, Kress learned that puffins had been hunted to extinction there. At one time, in fact, only a single pair lived in all of Maine. By 1969, the island had been overrun by the puffins' enemies—gulls. Still, Kress couldn't help but wonder whether the puffins might be transplanted from elsewhere and reestablished on the island. No one had ever attempted anything like that before.

In 1972, Kress began his restoration project by digging burrows and shoing away gulls on Eastern Egg Rock Island. Then he made a series of trips to one of the biggest puffin colonies in Canada. Helped by two

assistants, he extracted puffin chicks from their burrows, enduring occasional bites from distressed parents. With the chicks stored safely in soup cans, Kress and his crew carried them back to the United States, where they deposited one into each hand-dug burrow. For the next year, the researchers looked after the chicks, feeding them every day.

When the chicks eventually *fledged*—developed feathers and wing muscles that enabled them to fly—they did what young puffins naturally do: They left home for the open sea. From then on, Kress could only wait for the birds to return. One, two, three, four, five years went by.



Courtesy of Bill Scholtz

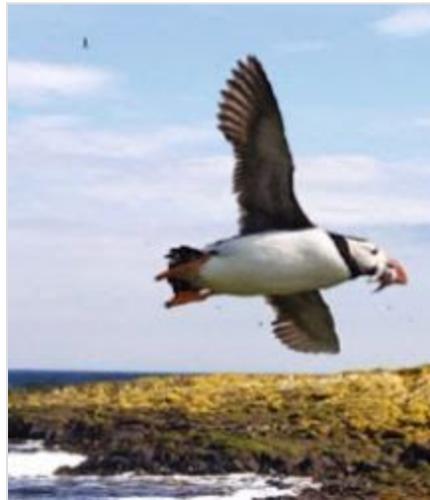
Stephen Kress and island supervisor Ellen Peterson attach a band to a puffin on Eastern Egg Rock.

Finally, on July 4, 1981, Kress sighted what he had long been hoping for: a pair of puffins caring for a chick on Eastern Egg Rock. “After 100 years

of absence and nine years of working toward this,” Kress wrote in his journal that evening, “puffins are again nesting at Eastern Egg Rock—a Fourth of July celebration I’ll never forget.”

Model Program

Today, Kress is vice president for bird conservation for the National Audubon Society. Thanks to his Project Puffin, Eastern Egg Rock is now home to more than 100 pairs of nesting puffins. Altogether, about 1,000 pairs live in Maine.



Steve Allen/Getty Images

A puffin flaps its wings 400 times a minute—a very high number for a bird of its size.

Kress's translocation techniques have involved more than digging burrows and transporting chicks. Puffins are *social* animals—they live in groups. So Kress set up wooden puffin decoys and broadcast puffin calls to lure puffins to the Maine islands. When the birds began arriving, he erected mirrors to create the illusion of bigger, more enticing colonies.

Countless seabirds have since benefited from Kress's ingenuity. Seabird conservationists around the globe have adopted his techniques to reestablish almost 50 species in 14 countries, including petrels in New Zealand and albatross in Japan. "That was always my hope," says Kress, "to extend this beyond the puffin."

Comprehension Questions

1. According to the text, which of the following statements is true about Atlantic puffins?

- A. They have orange legs and feet.
- B. They only eat plants.
- C. They prefer to live on land.
- D. They are aggressive.

2. How does the text describe Kress's relocation effort for the puffins?

- A. something that would only work for puffins
- B. too difficult to replicate for other sea birds

- C. a step-by-step process
- D. a groundbreaking, successful process

3. . Read these sentences from the text.

Puffins are *social* animals—they live in groups. So Kress set up wooden puffin decoys and broadcast puffin calls to lure puffins to the Maine islands. When the birds began arriving, he erected mirrors to create the illusion of bigger, more enticing colonies.

What can you conclude about puffins from this evidence?

- A. The puffins quickly grew distrustful of the wooden decoys that Kress set up.
- B. Puffins are more likely to want to nest in places where there are other puffins.
- C. Puffins like to be alone during the day and together at night.
- D. The puffins loved studying their own reflections in the mirrors that Kress installed.

4. Based on the text, how might Kress have felt while he was waiting to see if the puffins would return?

- A. unconcerned and confident
- B. nervous, but hopeful
- C. doubtful and unsure
- D. excited and enthusiastic

5. What would be another good title for this text?

- A. Puffins: Don't Discount Them Yet!
- B. Puffins: Different from the Average Sea Bird
- C. Puffins: Colorful, Loyal, and Smart
- D. Puffins: a Model Case for Conservation

6. Read this sentence from the text.

Atlantic puffins are short, **stocky** birds with black and white feathers, orange legs, orange feet, and large, triangular, orange-red beaks.

As used in the text, what does the word "**stocky**" mean?

- A. skinny and long
- B. stubborn
- C. thick and sturdy
- D. colorful

7. Choose the word that best completes the sentence.

Part of Kress's relocation strategy involved a trip to one of the biggest puffin colonies in Canada, _____ he could collect baby puffins and transport them back to Maine

- A. but
- B. if
- C. although
- D. so

8. According to the text, what does Kress mean when he says Atlantic puffins are "all-purpose birds"?

9. What is implied about the techniques Kress uses if they're now a worldwide model?

My Summary

(Have an introduction and a conclusion)(Font 14 and Arial or Times NewRoman)