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[**Are Humans an Invasive Species?**](http://blogs.smithsonianmag.com/science/2011/01/are-humans-an-invasive-species/)

By Sarah Zielinski

Are humans an invasive species?

Some readers of recent Smithsonian stories on [wild pigs in Texas](http://www.smithsonianmag.com/science-nature/111461059.html) and the [world’s worst invasive mammals](http://www.smithsonianmag.com/science-nature/The-Worlds-Worst-Invasive-Mammals.html) list have argued that we may have left out the worst invasive species of them all: *Homo sapiens*. But are humans really an invasive species?

Let’s start with the definition of an invasive species. It turns out, it’s not so simple. The [legal definition in the United States](http://www.invasivespeciesinfo.gov/laws/execorder.shtml) is “an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.” The International Union for Conservation of Nature (IUCN), which developed the list of the 100 world’s worst from which our invasive mammals piece originated, [defines them as](http://www.issg.org/is_what_are_they.htm) “animals, plants or other organisms introduced by man into places out of their natural range of distribution, where they become established and disperse, generating a negative impact on the local ecosystem and species.” And a [2004 paper in *Diversity and Distributions*](http://onlinelibrary.wiley.com/doi/10.1111/j.1366-9516.2004.00061.x/abstract) that examines the terminology of invasiveness notes that their is a lack of consensus on this topic and lists five dominant definitions for ‘invasive,’ the most popular of which is “widespread [nonindigenous species] that have adverse effects on the invaded habitat.”

Despite the lack of a single definition, however, we can pull from these definitions some general aspects of an invasive species and apply those to *Homo sapiens*.

1) An invasive species is widespread: Humans, which can be found on every continent, floating on every ocean and even circling the skies above certainly meet this aspect of invasiveness.

2) An invasive species has to be a non-native: Humans had colonized every continent but Antarctica by about 15,000 years ago. Sure, we’ve done some rearranging of populations since then and had an explosion in population size, but we’re a native species.

3) An invasive species is introduced to a new habitat: Humans move themselves; there is no outside entity facilitating their spread.

4) An invasive species had adverse effects on its new habitat and/or on human health: Humans meet this part of the definition in too many ways to count.

*Verdict*: We’re not an invasive species, though we’re certainly doing harm to the world around us. If you think about it, all of the harm done by invasive species is by definition our collective faults; some kind of human action led to that species being in a new place where it then causes some harm. And so I’m not at all astonished to find people arguing that we’re the worst invasive species of them all.

Directions: Answer the following questions in COMPLETE SENTENCES. There is no need to print out the article; you can answer these questions on a separate sheet of paper.

1. What evidence **supports** humans as an invasive species?
2. What evidence **does not support** humans as an invasive species?
3. Do you think humans are an invasive species? Why or why not?