

## New House rule eases transfer of federal lands

Tom Oates

On the first day of the 115th Congress, the US House of Representatives adopted a package of rules that will help guide its actions for the coming 2-year term. This is the normal order of business. The US Constitution directs that the House and Senate will each adopt its own rules independently, without review by the other.

However, a new budgeting rule contained within that larger package explicitly prohibits considering the budget impacts of federal land transfers to state and local governments and tribal entities. Previously, when considering the transfer of revenue-generating federal lands and associated natural resources, the Congressional Budget Office would score revenues in excess of net proceeds of the transfer as a cost.

The rule, authored by Natural Resources Committee Chairman Rob Bishop (R-UT), supports a broader effort by the Federal Land Action Group, a congressional team advocating for divesting federal public lands to local ownership and control. It frees a proposed transfer from the potential procedural hurdle of needing to offset associated monetary losses, such as oil, gas, and mining receipts.

Speaking for Chairman Bishop, press secretary Molly Block argues that federal land transfers to local governments “will help focus limited federal resources on the maintenance and enhancement of nationally significant federal lands”. There is an estimated \$22-billion unfunded public lands maintenance backlog. Yet the Department of the Interior, which is responsible for most federal lands, would see a budget cut of \$1.5 billion under President Trump’s proposed budget blueprint, a 12% decrease from the current level.

“The purpose is obviously to grease the skids so that federal public lands can be sold to the states. It is very worrisome as the resolution values public lands at zero”, says Bill Snape of the Center for Biological Diversity (Washington, DC). Lydia Weiss of The Wilderness Society (Washington, DC) observes, “We know what happens when these public lands are turned over to states – they get sold to the highest bidder”.

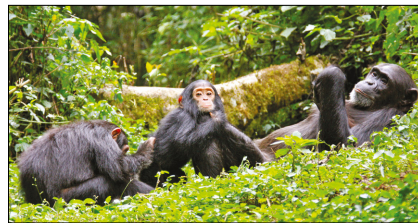
“This new rule is outrageous and absurd”, says Representative Raúl Grijalva (D-AZ), ranking minority of the House Resources Committee. “It would allow the federal government to give away every single piece of property it owns, for free, and pretend we have lost nothing of any value”, he continues. “We can disagree about whether our federal lands should be protected or turned over to extraction industries, but let’s do our jobs and have that debate.” ■

## New review of primate disease dynamics

Ken Ferguson

Traditional models of disease dynamics largely assumed that all individuals within a population are equally susceptible to infection and equally capable of dispersing disease agents, but more recent analyses have shown that some individuals – generally referred to as “super-spreaders” – are disproportionately responsible for pathogen transmission. Research on human pandemics, for instance, has shown that disease transmission is greatly inhibited in the absence of super-spreaders.

But the phenomenon of the super-spreader isn’t limited to humans. A recent review of disease transmission among non-human primates highlights the major role that super-spreaders play in the spread of pathogens among non-human primate populations (*Trends Parasitol* 2017; doi:10.1016/j.pt.2017.01.013). “Over the past couple of decades it’s become clear that just as everything



Chimpanzees in Kibale National Park, Uganda.

in natural systems is heterogeneous, so too is the relationship between sociality and disease transmission”, explains Tom Gillespie, a disease ecologist with Emory University (Atlanta, GA) and the primary author of the study. “These principles can be applied to any social taxa, but primates provide the greatest diversity of case studies with the requisite data in hand.”

Nearly 75% of primate species are in decline, with 60% facing possible extinction within the next several decades. Anthropogenic activities such as deforestation, logging, agriculture, hunting, and mining represent the primary threats to non-human

primates; in addition to their direct impacts, however, such activities also increase the rate of contact between human societies and primates, enhancing the likelihood of pathogen exchange. A better understanding of disease dynamics among primate populations may thus help to shape more effective and efficient conservation efforts, such as the development of vaccination strategies that focus on super-spreading individuals.

“We hope this review helps to jump-start a new way of approaching research into disease transmission, one that integrates ecology, behavior, and evolution on a grand scale”, continues Gillespie. “How do pathogens affect behavior and shape sociality? What about microbiome–behavior feedback loops? What role do social networks play in determining social immunity? How do we start to truly understand intergroup and interspecies transmission dynamics when we account for sociality and spatial overlap? These are the types of questions we really want to get people tackling.” ■