

NATIONAL WILDLIFE

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Watch NWF's Everglades Special on TBS Superstation, 10:05 PM E.T., Tuesday, September 26

Sibling Diplomacy

The calls of hungry chicks in a nest have always seemed clear enough: Young birds are crying “Feed me!” to their parents. But what if they’re not? “Barn owl chicks vocalize all night long even when the parents are not at the nest,” explains zoologist Alexandre Roulin of the

University of Bern in Switzerland. “This suggested that siblings are communicating with each other.” And that’s just what he and colleagues found in a recent study. The finding contradicts long-held assumptions by biologists about chick begging—at least in the case of barn owls.

It turns out that the chicks “negotiate,” as Roulin puts it, with one another for their

food long before parents arrive with their meals. The hungriest chicks win calling contests while the parents are away, and when the parents return with food, their siblings refrain from begging until the hungriest youngster is fed first. The researchers speculate that knowing which of the chicks needs the food the most avoids potential fights at mealtime and saves energy.



ALAN G. POTTS (BRUCE COLEMAN COLLECTION)

Surprise Sources of Runoff

Plastic mulch and fecal waste from pets are among the latest targets in the war against runoff pollution that washes from farmland, parks, yards and pavement into waterways. Plastic mulch stanches the growth of weeds, holds in heat and keeps moisture from evaporating from soil—but at an environmental cost that can be avoided with organic alternatives. A study released last fall from the U.S. Department of Agriculture compared runoff from differently mulched fields that were planted with tomatoes. Rainwater washed 10 times more soil and pesticides off a plastic-mulched field than off a field mulched with hairy vetch, a legume. The vetch also greatly reduced water runoff.

Researchers at Vanderbilt University in Nashville, Tennessee, meanwhile, are blaming pets for high levels of fecal coliform bacteria in local waterways. There is no direct evidence pets are responsible, but studies of sewage systems and the types of bacteria present in runoff point to pets, especially to animals that deposit waste on mowed grass or pavement. That’s because rain easily rinses waste off of such surfaces before it has a chance to decompose.



MARTY NORMAN

TROUBLED WATERS



STEVEN KELLER

The dead zone. In the United States, the term usually means the annual, growing patch of oxygen-deprived water near the mouth of the Mississippi River in the Gulf of Mexico. But as this map illustrates, conditions around the world are triggering dead zones plural, almost 60 at last count (some adjacent sites here are represented by single pins). All are choked of life by a lack of oxygen, the result of a chain of events that starts with nutrient-rich runoff into rivers and streams. The runoff feeds explosions of algae, which then die and use up the oxygen as they decay.