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better "know thy enemy." Data such as population sex/age composition, reproductive parameters, and food habits that can be gathered from the carcasses can provide information toward determining where and when the most vulnerable stages in the life history of these unwanted invaders might occur. Investing some small

amount of resources into such research efforts would enable managers to develop the most effective future removal efforts.

In contrast, sometimes the enemy turns out not to be all bad. Data collected from feral animal populations, especially long-isolated ones, can reveal interesting cases of environmental adaptation and

provide basic genetic and evolutionary information. For example, in the feral pigs (Sus scrofa) of Ossabaw Island off the coast of Georgia, 30 years of data has shown that this population has developed a number of traits over ~500 years that are not exhibited by any other pigs, wild or domestic (I). These traits include the ability to tolerate unusually high

This little piggy went to

market; this little piggy

went feral...

concentrations of salt in food (marsh grass, *Spartina* species) and drinking water (seawater) (2), the development of the highest levels of total body lipid reserves known of any ungulate (3), and a unique system for handling body lipid that produces a state of noninsulin dependent diabetes (4). These traits make the

Ossabaw Island feral pigs a unique component of the world's total suid biodiver-

sity and, moreover, one of interest to several lines of physiological and biomedical research. In fact, the Pigs and Peccaries Specialist Group of the International Union for Conservation of Nature and Natural Resources (IUCN) has named this pig as one of only two feral pig populations in the world being worthy of conservation consideration (5).

As emphasized by this group's evaluation, however, any such con-

sideration for the possible conservation of a feral population must be tempered by the assurance that these populations be so managed as to ensure that their impact is either minimal or nonexistent on endemic flora, fauna, or other ecological resources in the habitats where they are found. In some cases, this might argue for ex situ conservation of remnant captive populations (5). In any case, the possibility of a unique and hitherto unsuspected component of world biodiversity lurking within the feral animal populations themselves should not be overlooked.

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#### References and Notes

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# A Way to Boost NSF's Astronomy Program

THE OFFICE OF MANAGEMENT AND BUDGET commissioned a study to see if the astronomy program at the National Science Foundation





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(NSF) should be transferred to NASA (News of the Week, "Report finds fault with NSF oversight," A. Lawler, 14 Sept., p. 1967). The study, conducted by the Committee on the Organization and Management of Research in Astronomy and Astrophysics (COMRAA) of the National Research Council, was firmly against the transfer and made several alternative recommendations. However, I offer another idea of how to improve the balance of the NSF and NASA astronomy programs—upgrade NSF's Division of Astronomical Sciences (AST) to an Office of Astronomical Sciences.

A close look at AST's current responsibilities shows that such a change is overdue. No division at NSF has several national centers that give observing time to so wide a set of visitors; no division has such high levels of responsibility for international collaborations (namely, Gemini and ALMA); no division has such extensive responsibilities for operations abroad (e.g., in Chile); and no division needs a long-range spending plan to the degree that AST does. In contrast, an NSF office (like Polar Programs) routinely deals with international issues, has operations abroad involving several countries, and has longrange plans that must mesh with the plans of other agencies and foreign organizations. The AST has operated with these types of responsibilities without adequate recognition for many years and has not had the budget that its responsibilities require for effective operation. In an office mode, the astronomy program at NSF would be much better matched to, and be on a more equal footing with, its counterpart, NASA's Office of Space Sciences.

Making such a change would be a first step toward solving the types of management problems that prompted the Office of Management and Budget to ask for their study, and it would be a step toward solving other problems addressed by the COMRAA recommendations.

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### **CORRECTIONS AND CLARIFICATIONS**

**Letters:** "Managing climate risk" by M. Obersteiner *et al.* (26 Oct., p. 786). In the list of authors' addresses, extra words were accidentally inserted in J. Yan's affiliation. It is "Shanghai Jiaotong University, China."

**Brevia:** "Climate change in nontraditional data sets" by R. Sagarin and F. Micheli (26 Oct., p. 811). Because of an editing error, the name of Alaska's Tanana River was misspelled.

**Perspectives:** "A census of cosmic matter" by B. D. Fields (19 Oct., p. 529). The final note was inadvertently omitted from the article. It is, "This material is based on work supported by the National Science Foundation under grant number AST-0092939."

**NetWatch:** "Weather report" (5 Oct., p. 19). The URL for the University of Illinois weather site was incorrect; it is ww2010.atmos. uiuc.edu/(Gh)/guides/mtr/cld/home.rxml

# **Letters to the Editor**

Letters (~300 words) discuss material published in *Science* in the previous 6 months or issues of general interest. They can be submitted by e-mail (science\_letters@aaas.org), the Web (www.letter2science.org), or regular mail (1200 New York Ave., NW, Washington, DC 20005, USA). Letters are not acknowledged upon receipt, nor are authors generally consulted before publication. Whether published in full or in part, letters are subject to editing for clarity and space.

