

LETTERS

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Good News for European Vultures

SINCE THE OUTBREAK OF BOVINE SPONGIFORM ENCEPHALOPATHY (BSE) IN 2001, THE CONSERVATION of European scavengers has been the subject of a legal dilemma: Either we can strictly protect scavenger species (1) or we can destroy livestock carcasses, the scavengers' main source of food (2–5). In 2009, Donázar *et al.* (3) remarked that it was time for new regulations and that “encouraging fallen stock to be left in situ is the most ecologically harmonious, inexpensive, and efficient management method for the conservation of scavengers.” Fortunately, recommendations became reality. A broad consensus among scientists, conservationists, and managers (5) led to new EU regulations approved in March 2011 (6, 7). Now, the Spanish government has approved a disposition allowing farmers to abandon the remains of their animals in the field and/or feeding stations (8). Although the



application will be subject to some sanitary and administrative restrictions, the new scenario is grounds for optimism about the future of the Spanish vulture populations (which represent about 95% of European vultures).

With the application of this new measure, Spanish vultures will continue to provide valuable ecosystem services. In Spain alone, avian scavengers are capable of removing 9.9 million tons of carcasses per year. This in turn saves costs for farmers (about €20 per animal). The industrial destruction of carcasses carries costs between €66 and €96 per ton, in addition to the emission of greenhouse gases derived from transport and incineration (5). Overall, these events demonstrate that scientific arguments can indeed trigger positive political action and help to reconcile biodiversity conservation and human activities (9).

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2. Regulation CE 1774/2002 of the European Parliament and of the Council of 3 October 2002 laying down health rules concerning animal by-products not intended for human consumption (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2002R1774:20070724:EN:PDF>).
3. J. A. Donázar *et al.*, *Science* **326**, 664 (2009).
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6. Regulation CE 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as

regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No. 1774/2002 (Animal by-products Regulation) (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:300:0001:0033:EN:PDF>).

7. Regulation CE 142/2011 of 25 February 2011 implementing Regulation (EC) No. 1069/2009 of the European Parliament and of the Council laying down health rules as regards animal by-products and derived products not intended for human consumption and implementing Council Directive 97/78/EC as regards certain samples and items exempt from veterinary checks at the border under that Directive (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:054:0001:0254:EN:PDF>).
8. Royal Decree 1632/2011 of 14 November, regulating the feeding of certain wildlife species with animal by-products not intended for human consumption (www.boe.es/boe/consultas/bases_datos/doc.php?id=BOE-A-2011-18536) [in Spanish].
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Global Endemism Needs Spatial Integration

UNDERSTANDING THE REASONS WHY certain regions of the world have a high number of endemic species (i.e., species with a limited geographic distribution) is important because it is frequently used in prioritizing biodiversity conservation at both regional and global scales. B. Sandel and colleagues (“The influence of Late Quaternary climate-change velocity on species endemism,” Reports, 4 November 2011, p. 660) concluded that sites where climate is changing at a slower rate (low-velocity) are more likely to harbor endemic species than high-velocity sites. Sandel *et al.*'s endemism maps are quite different from previous maps of endemism (1–3). Their analysis would benefit from the study of regional variation and spatial patterns, particularly for mountain and glacial ranges such as the Asian Himalayas.

The European and Asian continents, although located at almost the same latitude, have experienced different glacial histories (4); many European species expanded in the post–Last Glacial Maximum Quaternary period (5), whereas Asian species such as