

Dr. Lucy A. Jordan  
Fish & Wildlife Biologist, U.S. Fish & Wildlife Service  
Utah Ecological Services Office  
2369 W. Orton Circle (2300 South), Suite 50  
West Valley City, Utah 84119  
Phone: (801) 975-3330  
Fax: (801) 975-3331  
email: lucy\_jordan@fws.gov

Experience is that marvelous thing that enables you to recognize a mistake when you make it again.

----- Forwarded by Lucy Jordan/R6/FWS/DOI on 08/10/2006 03:36 PM -----

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|      |      David Inouye <inouye@umd.edu>      ;      |
|      |      Sent by:                          |
|      |      pollinator-bounces+lucy_jordan=fws.gov@list|
|      |      s.sonic.net                          |
|      |      &n bsp;                              |
|      |      08/10/2006 11:30 AM                |
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|      |      To:      pollinator@coevolution.org      &n bsp; |
|      |      c c:    |
|      |      Subject: [Pollinator] habitat fragmentation and pollination |
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Aguilar, R., L. Ashworth, L. Galetto, and M. A. Aizen. 2006. Plant reproductive susceptibility to habitat fragmentation: review and synthesis through a meta-analysis. *Ecology Letters* 9:968-980.

The loss and fragmentation of natural habitats by human activities are pervasive phenomena in terrestrial ecosystems across the Earth and the main driving forces behind current biodiversity loss. Animal-mediated pollination is a key process for the sexual reproduction of most extant flowering plants, and the one most consistently studied in the context of habitat fragmentation. By means of a meta-analysis we quantitatively reviewed the results from independent fragmentation studies throughout the last two decades, with the aim of testing whether pollination and reproduction of plant species may be differentially susceptible to habitat fragmentation depending on certain reproductive traits that typify the relationship with and the degree of dependence on their pollinators. We found an overall large and negative effect of fragmentation on pollination and on plant reproduction. The compatibility system of plants, which reflects the degree of dependence on pollinator mutualism, was the only reproductive trait that explained the differences among the species' effect sizes. Furthermore, a highly significant correlation between the effect sizes of fragmentation on pollination and reproductive success suggests that the most proximate cause of reproductive impairment in fragmented habitats may be pollination limitation. We discuss the conservation implications of these findings and give some suggestions for future research into this area.

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Pollinator mailing list  
Pollinator@lists.sonic.net  
<http://lists.sonic.net/mailman/listinfo/pollinator>