

NATIVENESS, INVASIVENESS, AND NATION IN AUSTRALIAN PLANTS*

LESLEY HEAD and PAT MUIR

ABSTRACT. The conceptualization of alien invasive species conflates two axes of variability that have become unhelpfully blurred. The nativeness/alieness axis refers to the presumed belonging of a species in ecological or social space. Invasiveness refers to the behavior of the species in question, particularly in relation to other species. The overlay of nation introduces further variability. Teasing these axes apart is important for more effective environmental management. We examine these concepts using two influential forms of ecological knowledge: the biogeographical and ecological literature and the vernacular experiences of suburban backyarders. Three case studies, the invasive native *Pittosporum undulatum* and two invasive exotics, *Lantana camara* and *Cinnamomum camphora*, illustrate the complex and contingent nature of human interactions with such species and the potential for human interactions to increase and/or reduce the propagation of plant species. *Keywords:* Australia, backyarders, Cinnamomum camphora, Lantana camara, Pittosporum undulatum, weeds.

Species have been moving around the globe throughout the ecological history of the Earth. These movements have accelerated in the last few hundred years as a consequence of European colonialism, intensified human impacts on the environment, and economic and social globalization. The Global Invasive Species Program of the International Union for the Conservation of Nature now argues that “Invasive alien species are recognised as one of the leading threats to biodiversity and also impose enormous costs on agriculture, forestry, fisheries, and other human enterprises, as well as on human health” (Wittenberg and Cock 2001, 1).

But the concept of invasive alien—or exotic, or introduced—species conflates two axes of variability that need to be differentiated if management solutions are to be most effective. Invasiveness refers to the behavior of an organism, particularly in relation to other species and ecosystems. Alieness—or its converse, nativeness—refers to its presumed belonging in a certain place. Invasives take over, but they may take over places in which they belong. Aliens are in the wrong place, but they are not necessarily taking over. The idea of nation in concepts of ecological belonging adds a third layer of variability. Nation, as a sociopolitical construct, may or may not make ecological sense, and it operates at a variety of scales. In the European context, nation may be too small; in the Australian context, it may be too large.

In this study we analyze the interpenetration of nativeness, invasiveness, and nation in relation to Australian plants. We illustrate the variable social processes implicated in such conceptualizations by drawing on two distinct bodies of environmental understanding. The first is the biogeographical and ecological literature,

* This project is funded by ARC Discovery grant DP0211327. We thank Eva Hampel for assistance with the interviewing, David Trigger for discussions, and anonymous reviewers for their useful comments.

✪ DR. HEAD is a professor of geography at the University of Wollongong, Wollongong 2522, Australia, where Ms. MUIR is a research assistant in geography.