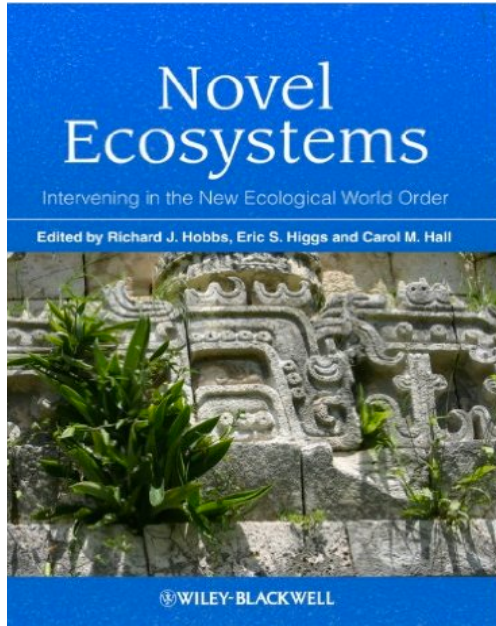


**Ecología e Intervención  
en Bosques Noveles:  
Lecture 1**



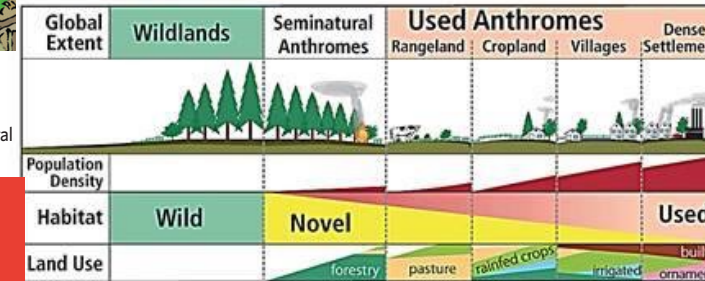
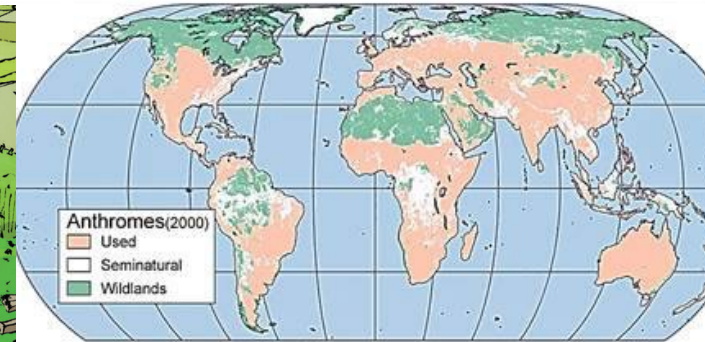
¿Qué son ecosistemas noveles?  
 ¿Por qué son importantes?  
 ¿Como manejarlos?



### RAGAMUFFIN EARTH

A small group of ecologists is looking beyond the pristine to study the scrubby, feral and untended. **Emma Marris** learns to appreciate 'novel ecosystems'.

NATURE | Vol 460 | 23 July 2009



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Forest Ecology and Management 190 (2004) 145–161

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## Emerging forests on abandoned land: Puerto Rico's new forests

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COMMENTARY

### The Emerging Era of Novel Tropical Forests

Ariel E. Lugo<sup>1</sup>

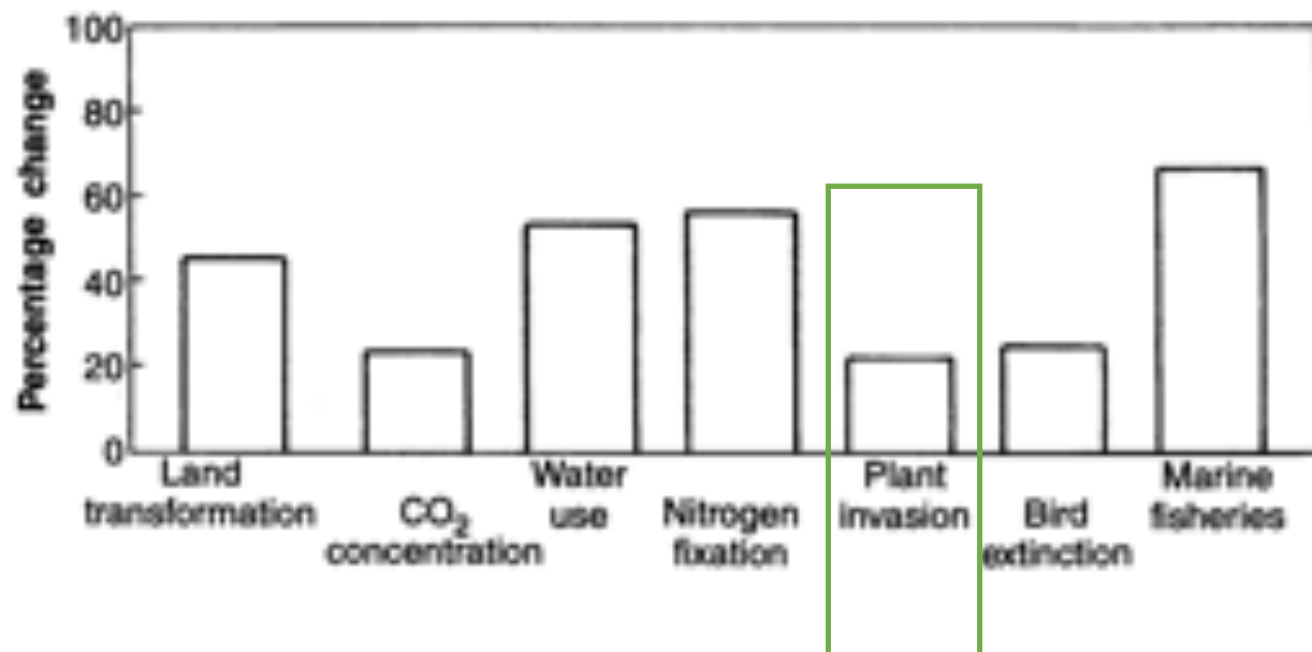
International Institute of Tropical Forestry, USDA Forest Service, 1201 Ceiba St. Jardín Botánico Sur Río Piedras, Puerto Rico



# Human Domination of Earth's Ecosystems

Peter M. Vitousek, Harold A. Mooney, Jane Lubchenco, Jerry M. Melillo

www.sciencemag.org • SCIENCE • VOL. 277 • 25 JULY 1997







Peter Vitousek won the 2010 Japan Prize in the field of biological production and environment

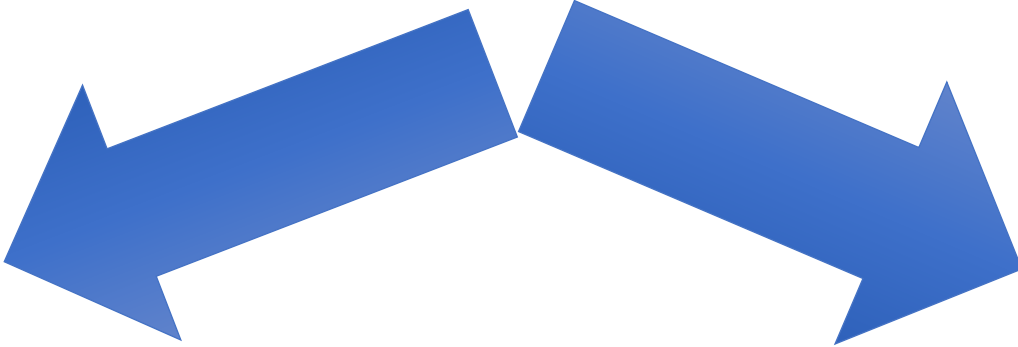
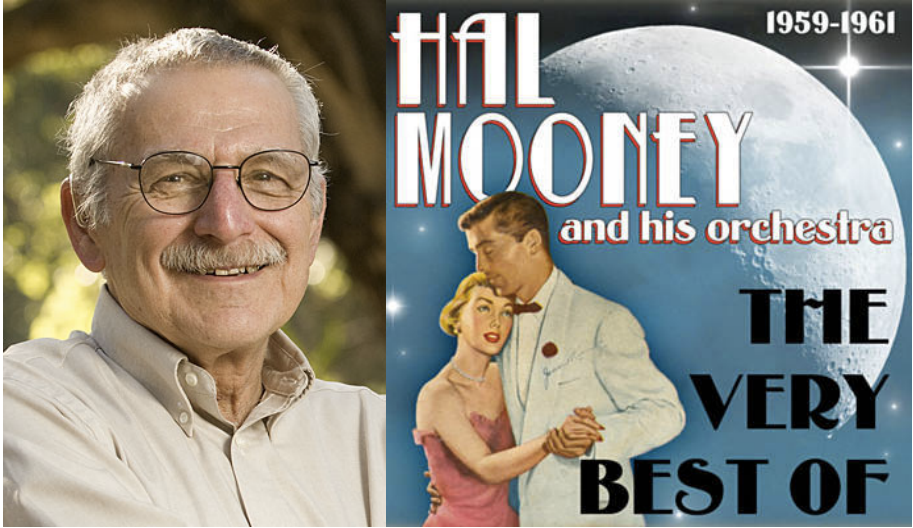
*Ecological Monographs*, 59(3), 1989, pp. 247–265  
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## BIOLOGICAL INVASION BY *MYRICA FAYA* IN HAWAII: PLANT DEMOGRAPHY, NITROGEN FIXATION, ECOSYSTEM EFFECTS<sup>1</sup>

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Peter Vitousek won the 2010 Japan Prize in the field of biological production and environment





*Global Ecology and Biogeography, (Global Ecol. Biogeogr.) (2006) 15, 1–7*



## ECOLOGICAL SOUNDING

# Novel ecosystems: theoretical and management aspects of the new ecological world order

Richard J. Hobbs<sup>1\*</sup>, Salvatore Arico<sup>2</sup>, James Aronson<sup>3</sup>, Jill S. Baron<sup>4</sup>, Peter Bridgewater<sup>5</sup>, Viki A. Cramer<sup>1</sup>, Paul R. Epstein<sup>6</sup>, John J. Ewel<sup>7</sup>, Carlos A. Klink<sup>8</sup>, Ariel E. Lugo<sup>9</sup>, David Norton<sup>10</sup>, Dennis Ojima<sup>4</sup>, David M. Richardson<sup>11</sup>, Eric W. Sanderson<sup>12</sup>, Fernando Valladares<sup>13</sup>, Montserrat Vilà<sup>14</sup>, Regino Zamora<sup>15</sup> and Martin Zobel<sup>16</sup>

# NOVEL ECOSYSTEMS

## INTERVENING IN THE NEW ECOLOGICAL WORLD ORDER





Hoh Rainforest, Olympic National Park, Washington, USA (Photo: RJ Hobbs)

*“Do not let spacious plans for a new world divert your energies  
from saving what is left of the old.” Winston Churchill*





*Pinus radiata* invading grassland in the Mackenzie Basin, New Zealand (Photo: RJ Hobbs)

