

Ecological Restoration

**The best conservation
strategy for the
climate change century?**





Chasing Cranes: From Extremadura to Iowa, via Hornborgasjön

Gregory Norminton

Tries to burn a prairie
(and fails)





Chasing Cranes, AGAIN

A Little Learning...

- The Crane Foundation, Baraboo
- The Madison Arboretum
- SER in Zaragoza
- Restoring natural capital in St Louis



Working Out Working for Water: Restoring Relationships?



Chicago: Burning Prairies, Burning Passions



Cinque Terre: Keeping Nature Out? Restoring a Cultural Landscape



Home Truths1: The Last of the Woods Laid Low?

San Jose 2007

Future shock on
Jasper Ridge



Climate change changes the Restoration Agenda

- Will the trees they are planting now survive even a lifetime?
- As a restoration ecologist, I simply don't know what to tell them...

Patricia Townsend on her Costa Rican cloud forest project



Big Ambitions: Dreamtime in Gondwanaland



Giving the People Ownership of Restoration: Janzen, Hallwachs and Costa Rica's ACG

Killing for Conservation

The Strange paradox of
Restoration
in New Zealand





Traditional Ecological Knowledge: The Mayan Men (and Women) who ‘make the rainforest’



Home Truths 2: Making Black Deserts Bloom

Three Trends, One restoration story?

- Ecocentric Restoration
- Restoration of natural capital
- Novel Ecosystems in a new century

Key Questions

- Why restore?
- Restore to what?
- Restore for whom?

Restoration benefits 1

- A new paradigm for a positive, interactive, relationship between humans and nature
- We don't have to be the bad guys on the planet...**the human relationship with nature is not inherently destructive and dysfunctional**
- Engagement -- restoration offers every one an opportunity to do something, however small, to reverse environmental damage

Restoration benefits 2

- Empowerment -- this message of engagement braces people to play an active role. Conversely, messages that focus exclusively on catastrophe and degradation tend to foster impotent despair.
- A unique learning process about our environment -- you only know how something really works when you try to rebuild it.
- The recovery of native biodiversity, from our backyards to remote places...AND

Restoration of natural capital (RNC)

- Where ecological restoration meets hard economic realities.
- The environment is not a luxury. It produces essential services for our well-being, ultimately for our existence.
- Natural capital, and the ecosystem services it supplies, is the basis for all economies.

What is natural capital?

- Natural Capital is an economic metaphor for the limited stocks of physical and biological natural resources found on Earth.
- It is a concept which attempts to foster a common language between ecologists and economists, and therefore to enable restoration to engage with the gears of public policy.

What is natural capital?

- Renewable natural capital (living species and ecosystems)
- Cultivated natural capital (e.g. crops and forest plantations)
- Replenishable natural capital (atmosphere, potable water, fertile soils)
- Non-renewable natural capital (sub-soil assets, e.g. petroleum, coal, diamonds, etc.)

RNC -- Multiple Benefits

- Restoring natural capital -- a wetland, for example -- brings multiple benefits
- Fish stocks for the food industry
- Waste filtration
- Flood control

And there's more...

- Recreational uses
- Inspiration and uplift
- Habitat for biodiversity
- And then some!

RESTORATION IS NOT A MAGIC BULLET

- + **UNLESS WE MAKE RADICAL CHANGES IN OUR POPULATION CONTROL, OUR ECONOMIC AND CULTURAL PARADIGMS, AND ULTIMATELY IN OUR PERSONAL LIVES...**
- + **IT MAY BE THAT ALL RESTORATIONISTS ARE DOING IS REARRANGING BLOCKS OF SEMI-NATURAL REAL ESTATE ON THE DECKS OF PLANET **TITANIC**, OUR BACKS TO THE COMING ICEBERG**
- + **DOES THAT MEAN WE SHOULD NOT TRY? No, BECAUSE RESTORATION IS..**

An Enspiriting vision

“Let us go beyond mere salvage to begin the restoration of natural environments... There can be **no purpose more enspiriting** than to begin the age of restoration, reweaving the wondrous diversity of life that still surrounds us.”

-- EO Wilson









Dawn of a New Relationship with Nature:
Restoration is engagement



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