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Agricultural Outlook Forum 2005
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FIGHTING INVASIVE ALIEN SPECIES IN BRAZIL

Dr. Silvia Ziller, Founder and Executive Director
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Instituto Hórus
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the Public



ASHOKA EMPREENDEDORES SOCIAIS

Fighting invasive alien species in Brazil





Instituto Hórus
de Desenvolvimento e
Conservação Ambiental

THE HORUS INSTITUTE

FOR ENVIRONMENTAL CONSERVATION AND DEVELOPMENT

Founded in March, 2002

in Florianópolis, Santa Catarina, BRAZIL

Mission:

Develop alternatives in environmental conservation integrated with social and economic development, production systems and the daily life of people.

Focus: invasive alien species

 sustainable use of native biodiversity as
 alternatives to replace aliens

Initial support: Ashoka Social Entrepreneurs



ASHOKA EMPREENDEDORES SOCIAIS



Instituto Hórus
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Conservação Ambiental

THE HORUS INSTITUTE

FOR ENVIRONMENTAL CONSERVATION AND DEVELOPMENT

Action:

- Generate data and information systems on IAS
- Control IAS in the field
- Awareness and capacity building
- Influence public policies and action at federal and state governments
- Disseminate information through the press
- Build Brazil network to work against IAS

Network: GISP, GISIN, ISSG/IUCN, IABIN/USGS – I3N, Ashoka

Partners: The Nature Conservancy, Universidad del Sur Argentina, IDEAAS, Liga Ambiental, Brazilian NGOs

The first website on invasive species in Brazil

www.institutohorus.org.br



SAVING THE LAST GREAT PLACES ON EARTH

SOUTH AMERICA CONSERVATION REGION

INVASIVE SPECIES PROGRAM FOR SOUTH AMERICA

Starting January, 2005

Action plan: Brazil survey of IAS (ongoing)

I National Brazilian Symposium on IAS

Official list of invasive alien species in Brazil

Improve forest management to control invasions

Adjustments in herbicide labels for control of IAS

Integration with GISP / I3N / ISSG / GISIN

Disseminate database/survey to other countries

Improve prevention strategies

Build regional network for work against IAS

<http://tncweeds.ucdavis.edu/>

The context of IAS in Brazil

Scarce awareness

No council

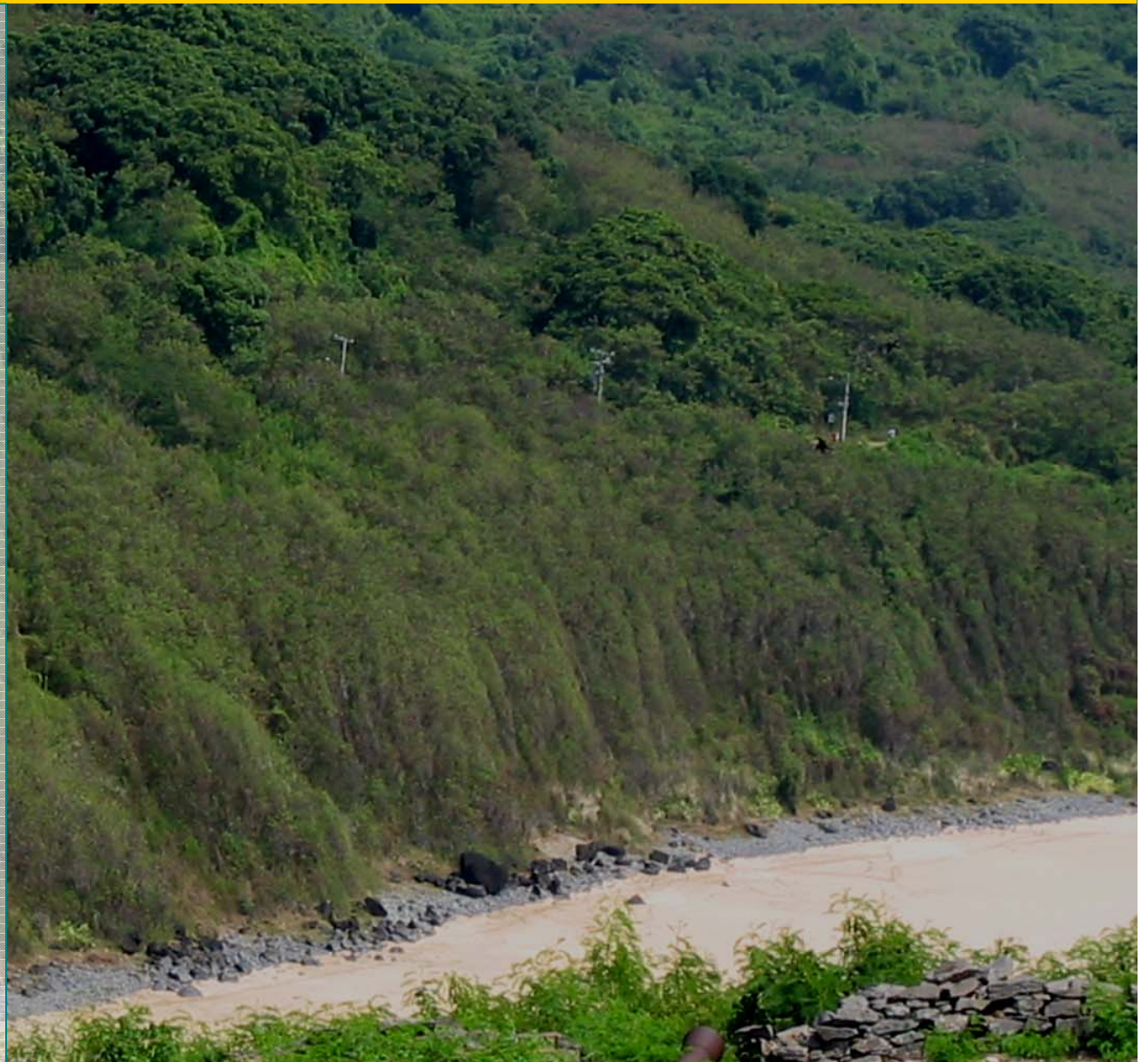
Not part of
professional
courses

Scarce action

Scarce research

Promotion of IAS for
development

No weed risk
assessment
includes
environmental
variables



Causes of introduction in Brazil

Horticulture: 32%

Food: 24%

Forage: 12%

Forestry: 8%

Soil erosion control: 4%

Total: 86.5%

Accidental: 13.5%

Number of species: 167



What has been done?

Information

Awareness

Regulations

Action



Melinis minutiflora – molasses grass,
Brasilia National Park

What has been done?

Information

National survey on IAS supported by Ministry of Environment
(influence of GISP regional workshop in 2001)

DATABASE FOR WEB ACCESS

- **Species description and origin**
- **Places of occurrence in Brazil and elsewhere**
- **Habitat invaded**
- **Description of invasion**
- **Impacts**
- **History of introduction**
- **Control methods**
- **Data providers and experts**
- **References**

PHOTO BANK



Cirsium vulgare

What has been done?

I Brazilian Symposium on IAS

October 2005, Brasília, Brazil

Leveling concepts and science

Capacity building

Data collection to improve survey

Scientific papers

Encouragement of research

Side events: polemic issues – IAS of commercial value; herbicides for conservation; regulations

Issue of national relevance

Support from Ministry of Environment

Federal Environmental Agency - IBAMA



FACT SHEETS

Hovenia dulcis

Common name: Japanese cherry



AWARENESS

Average 2 lectures/month in 2004: universities, scientific events, extension courses and government meetings

Media: newspapers, magazines, TV and radio; increased visits to website



Lagoa do Peixe National Park, RS - Brazil

What has been done?

Regulations

Convention on Biological Diversity

National Policy on Biodiversity

(with influence from GISP workshop)

Environmental Crime Law

Rare legal resolutions on some species

MISSING

Official list of IAS to back up the laws

ACTION

Forum on IAS and Sustainable

Development in Rio Grande do Sul

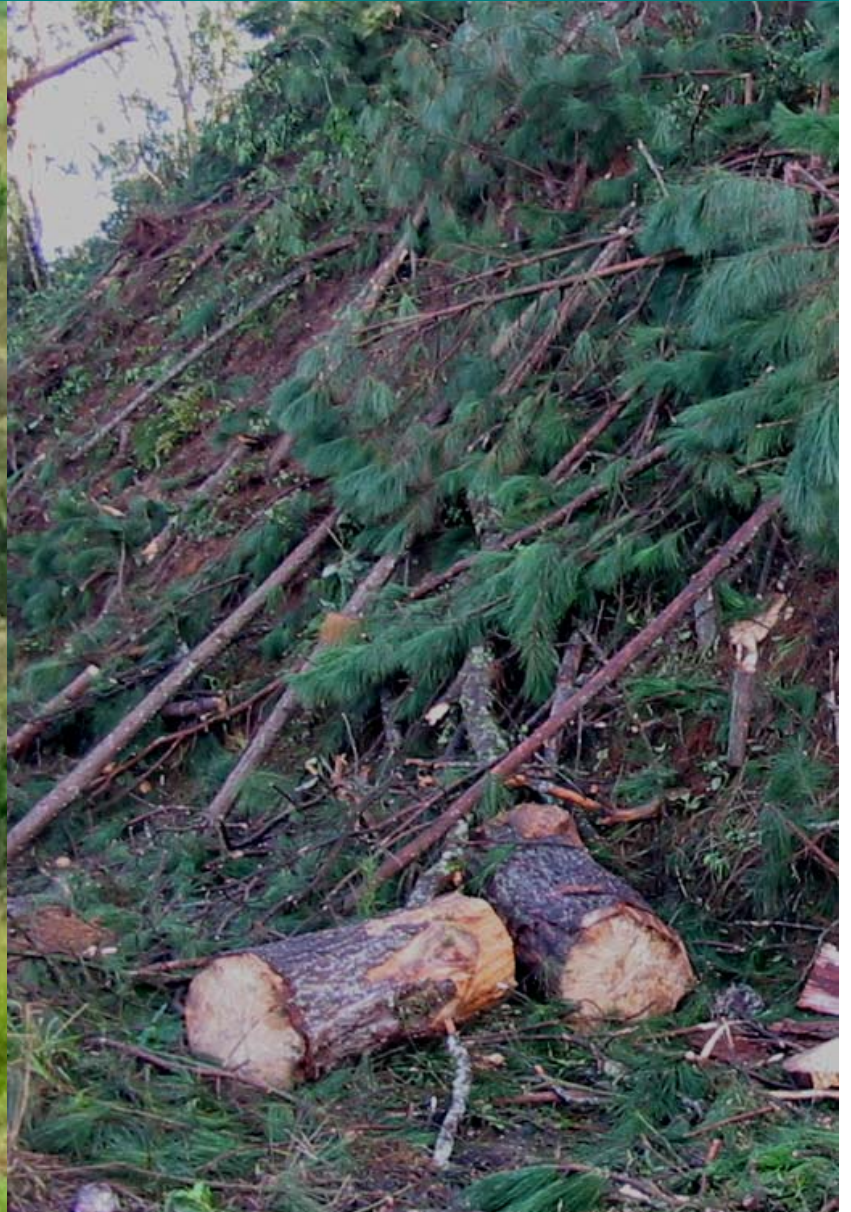
Parana State Environment Council



Action!

Protected area management plans in
Paraná state, South Brazil

State plan for removing IAS from all
protected areas



Action!

Control of IAS in 100,000 ha of
Atlantic Forest

Legal preservation areas

Espírito Santo / Bahia, Brazil

Species are:

Acacia mangium – wattle

Elaeis guineensis – oil palm

Leucaena leucocephala – leucena

Mimosa caesalpiniiifolia



Action!

Leucaena leucocephala – leucena



Action!



Mimosa caesalpiniiifolia

Action!



Elaeis guineensis – oil palm – Sept. 2004

Action!



Elaeis guineensis – oil palm – Sept. 2004

Action!



Elaeis guineensis – oil palm – 5 months later!

Action!



Elaeis guineensis – oil palm – 5 months later!

SURPRISE: the forest is coming back!

***GIVING THE
ATLANTIC
FOREST A
SECOND
CHANCE!***

***ALL TREATED
OIL PALMS
DIED!***

***STRONG
REGROWTH
OF NATIVE
SPECIES***

***MORE LIGHT
FOR PIONEER
SPECIES, BUT
LESS OIL
PALM
SEEDLINGS!***



Elaeis guineensis – oil palm – area 5 months later!



For more information, please visit:

www.institutohorus.org.br

<http://tncweeds.ucdavis.edu>

or email us at

contato@institutohorus.org.br

THANK YOU!

Silvia Ziller, The Horus Institute, Brazil