Conservation in China, Present and Future Challenges

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China's biodiversity

China is a country with **rich biodiversity**

China has higher plants 32,000 species, is the third largest number in the world, only next to Brazil and Columbia

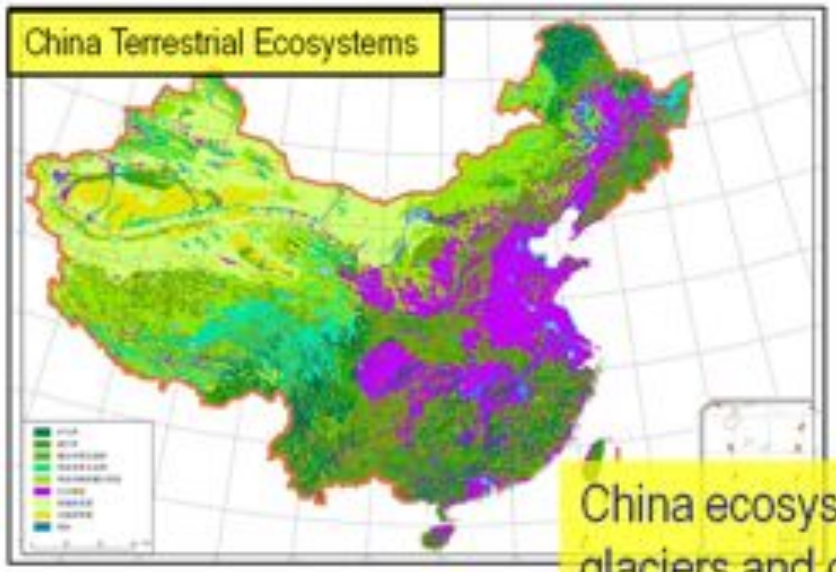
- Moss, 2200 species, 9.7%
- Fern, 2200--2600 species, 22%
- Gymnosperm, 250 species
- Angiosperm, 30,000 species, 10%

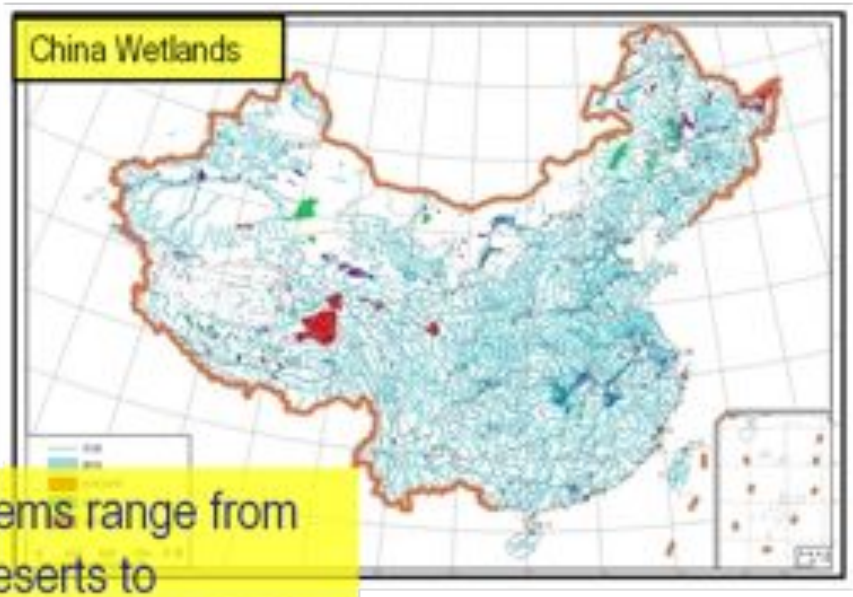
China's biodiversity

China has vertebrate 6347 species,
Chinese endemic species 667

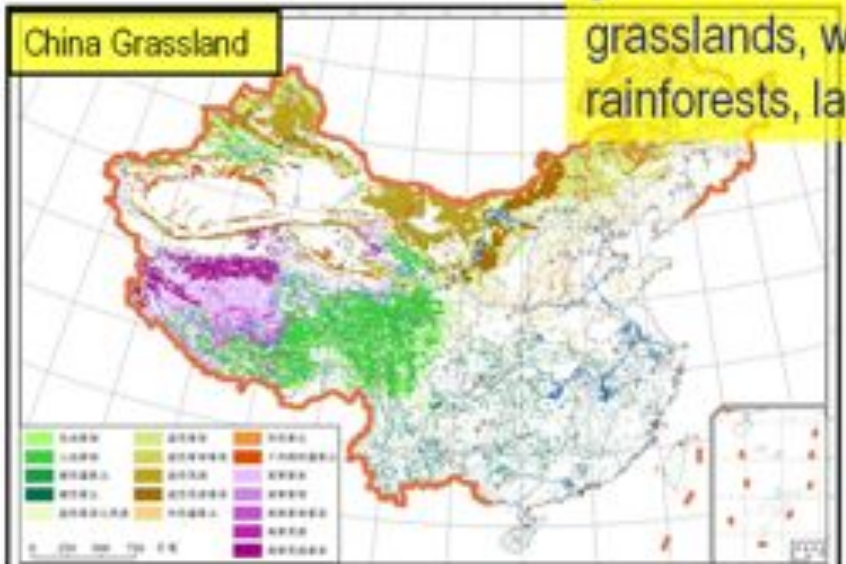
Animals	No of Sp in China	Percentage of the world (%)	Endemic Sp	Percentage of endemic Sp(%)
Vertebrates	6373	14.03	638	10.01
Birds	1294	13.26	69	5.33
Fishes	3862	13.74	440	11.39
Mammals	607	15.1	73	12.03
Reptiles	412	6.5	26	6.31
Amphibian	295	7	30	10.17

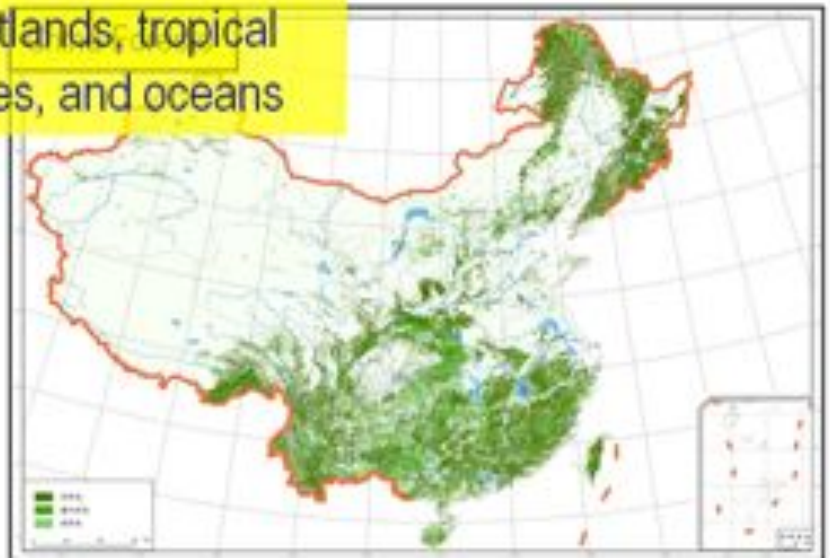
China's ecosystems





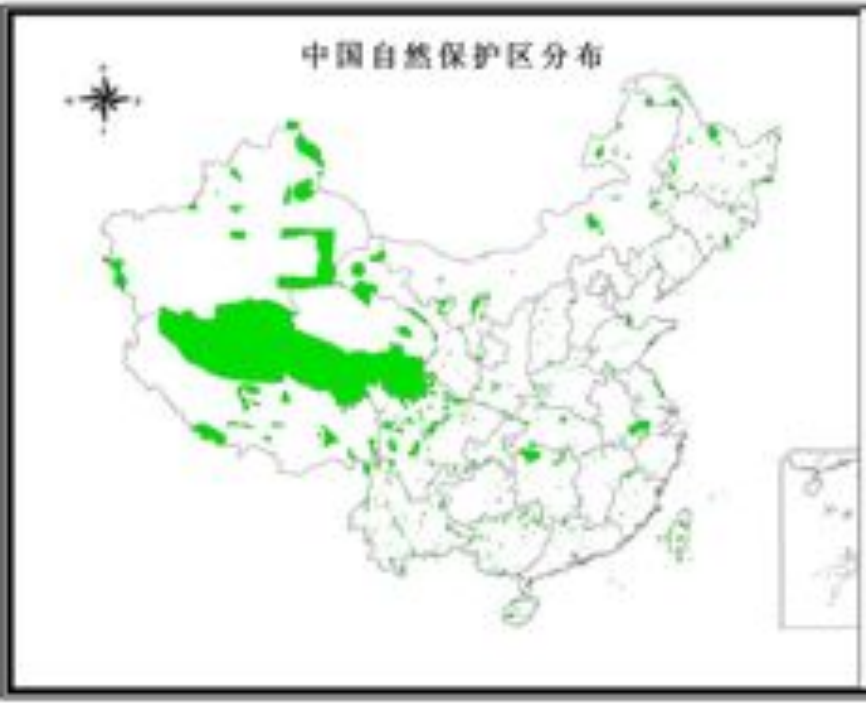
China ecosystems range from glaciers and deserts to grasslands, wetlands, tropical rainforests, lakes, and oceans



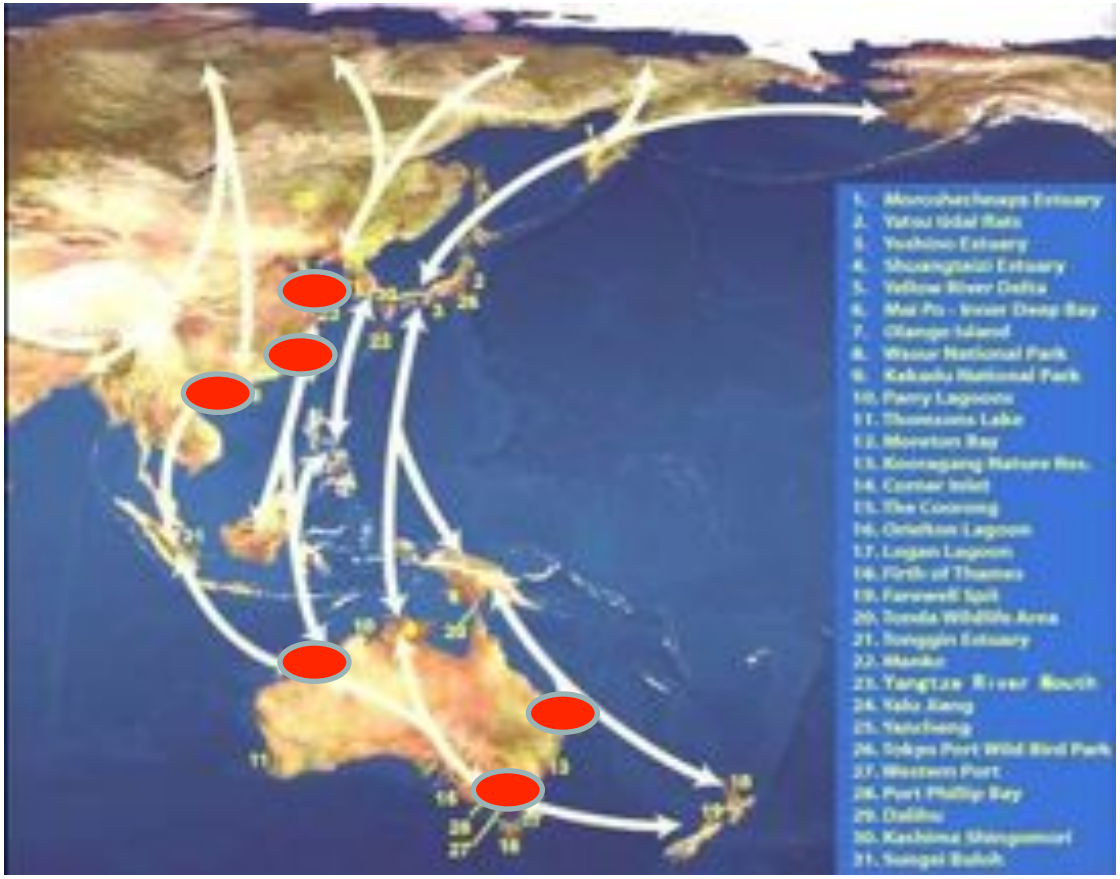


Nature reserves development program

- By 2010, China had set up 2588 nature reserves, about 17% land under protection of nature reserves. 90% of the endangered plants and animals protected in nature reserves
- It is the world largest nature reserve system.



Implemented new regional development strategy



East Asia bird migration route

- Pearl River Estuary
- Yangtze Estuary
- Yellow River Estuary

Spread to

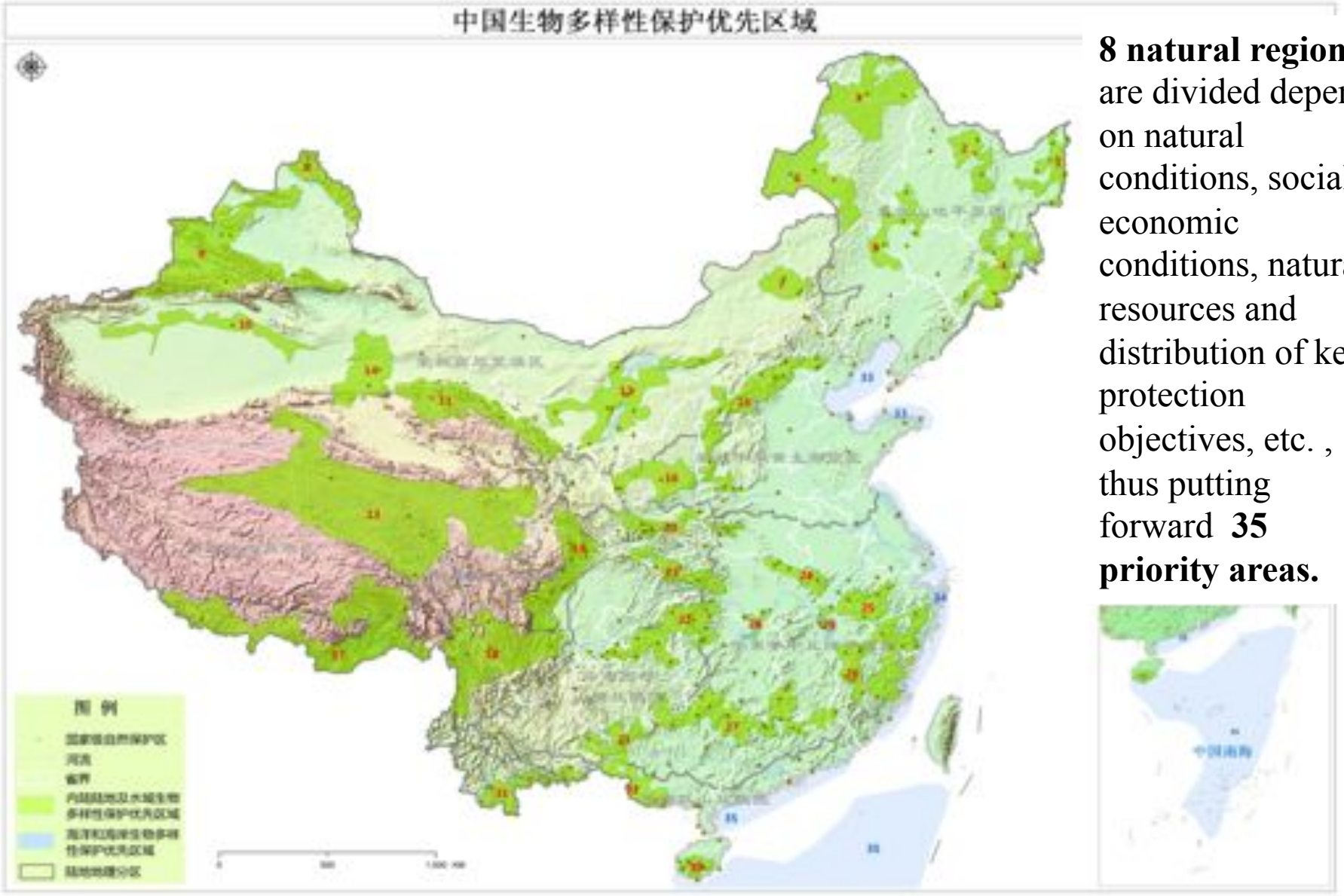
- WWF Australia
- WWF Russia
- WWF Japan

Linking

- WWF HK
- WWF Shanghai office
- WWF CPO marine prog.

(2) Network of estuaries and coastal wetland conservation combined with EAAF

Priority Areas of Biodiversity Conservation (MEP, 2010)



8 natural regions are divided depend on natural conditions, social-economic conditions, natural resources and distribution of key protection objectives, etc. , thus putting forward **35 priority areas.**

Priority Areas of Biodiversity Conservation(MEP, 2010)

1.Priority areas for terrestrial and freshwater biodiversity conservation (32 priority areas)

2. Priority areas for marine and coast biodiversity conservation.
（3 priority areas）

China's Environmental Issues

- **Water Crisis**

  China has only 7% of the Earth's freshwater resources but comprises a 20% share of the world population, placing an immense pressure on its water reserves. This is exacerbated by heavy pollution, rapid industrial growth, unsustainable exploitation of natural resources and an increasing demand for hydropower.

- **Biodiversity Loss and Ecosystem Degradation**

  1,399 species of high plants (about 4.4 per cent of the total) and 233 species of vertebrates are listed as endangered to extinct in China. The rapid extinction rate is likely to cause collapses of entire ecosystems.

- **Climate Change**

  China, world's largest emitter of greenhouse gas, driven by industralization and urbanization, will continue to burden the global climate.

- **Deep Ecological Footprint**

  China has gone from being one of the more moderate consumers of the planet's resources to one of the largest, according to the *Report on Ecological Footprint in China*. China's ecological footprint has quadrupled.

Water Issues

Major River System in China

Quantity

- Floods
- Shortage

Quality

- Pollution
- Erosion
- Biodiversity loss

Management

- Over-exploitation
- Governance

Water pollution

Water quality

- 745 national water environmental quality monitoring stations

I Class: 3%

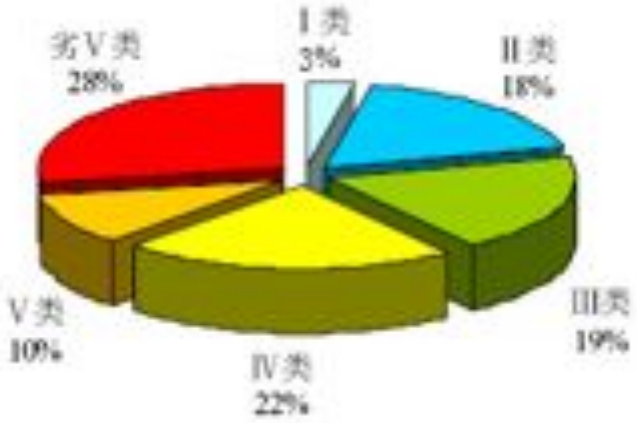
II Class: 18%

III Class: 19%

IV Class: 22%

V Class: 10%

< V Class: 28%

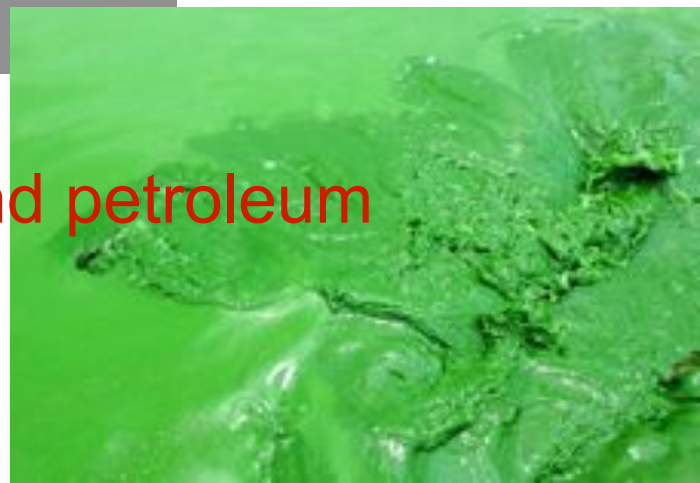


Water uality: Lake

- 28 lakes:
  - I Class: 0, 0
  - II Class: 2, 7.1%
  - III Class: 6, 21.4%
  - IV Class: 4, 14.3%
  - V Class: 5, 17.9%
  - < V Class: 11, 39.3%

Most polluted lakes
- Taihu lake, Jiangsu
- Tianchi, Yunnan
- Baiyangdian Lake, Hebei
- Donghu Lake, Hubei
- Caohu, Anhui

- Main pollutants: $COD_{Mn,}$ NH4-N, and petroleum



Biodiversity Issues

- Habitat lost
- Over-hunt and harvested
- Invasive species
- Ecosystem degradation
- Species loss
- Climate change

Habitat loss

Over-hunted and harvested

Panthera tigris virgata

Saiga tatarica

Equus przewalskii

Gast[illegible] Rhizoma

Astragalus

Boschniakia kawakamii

野生杜鹃

野生兰花

Invasive species

- invasive species
- About 57 billion economic loss each year

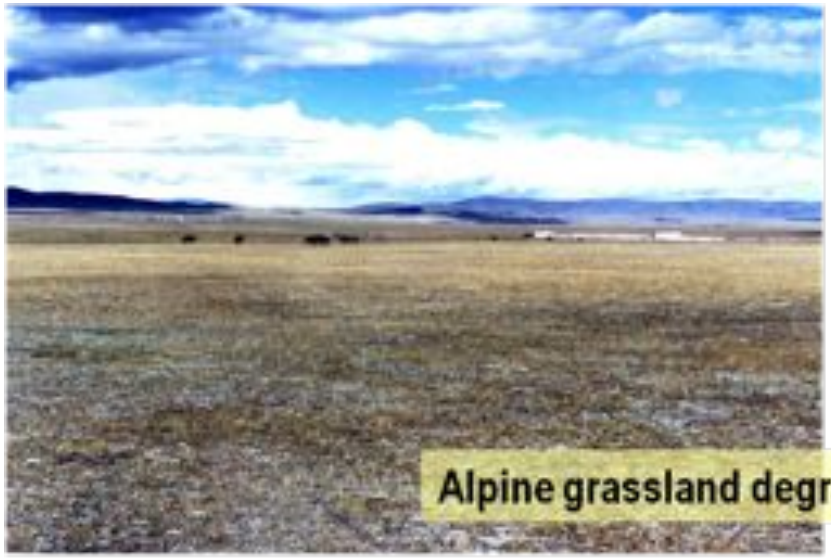
Eichhornia crassipes
泛滥成灾的水葫芦

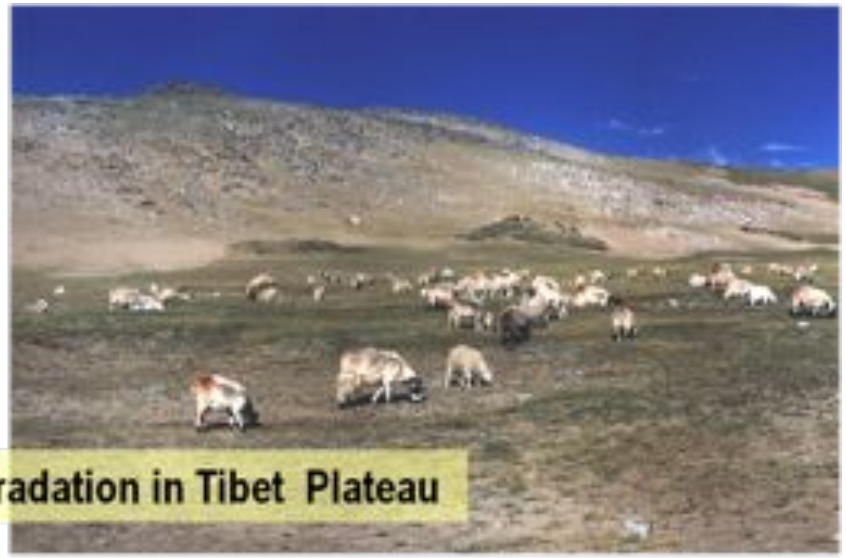
Opogona sacchari
蔗扁蛾

Brontispa longissina
椰心叶甲

Solidgo canadensis
北美黄花

Wedelia trilobata
澎蜞菊





Alpine grassland degradation in Tibet Plateau

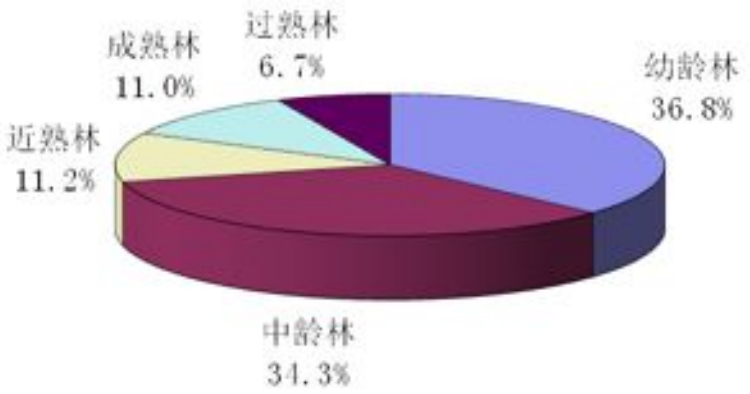
Desertification in dry valley of Lhasa river

Ecosystem degradation in south-west mountain area

Rocky desertification in Guizhou karst area

Forest ecosystem services declined

- Mature forests only 28.9%, young & middle age forests >70%,
- Forest stock volume: 0.131 ha/capita, about 1/5 of world average,
- Forest structure simplified, forest ecosystem services declined
  - soil and water conservation, providing wildlife habitats



Endangered Species Loss

I am hungry,give me some food!
Thank you!

WWF

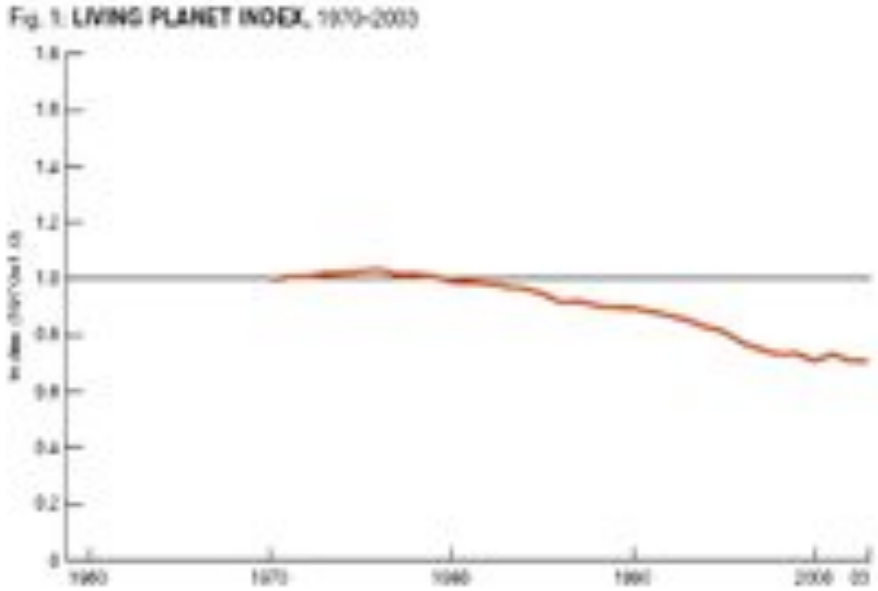
for a living planet®

地 球 生 命 力 报 告 2 0 0 8

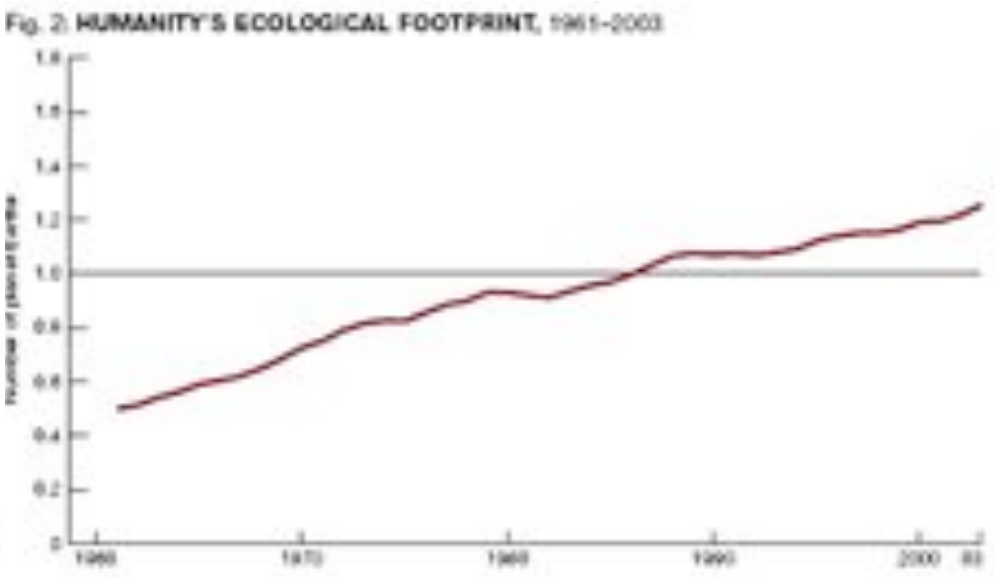
LIVING PLANET REPORT 2008

ZSL

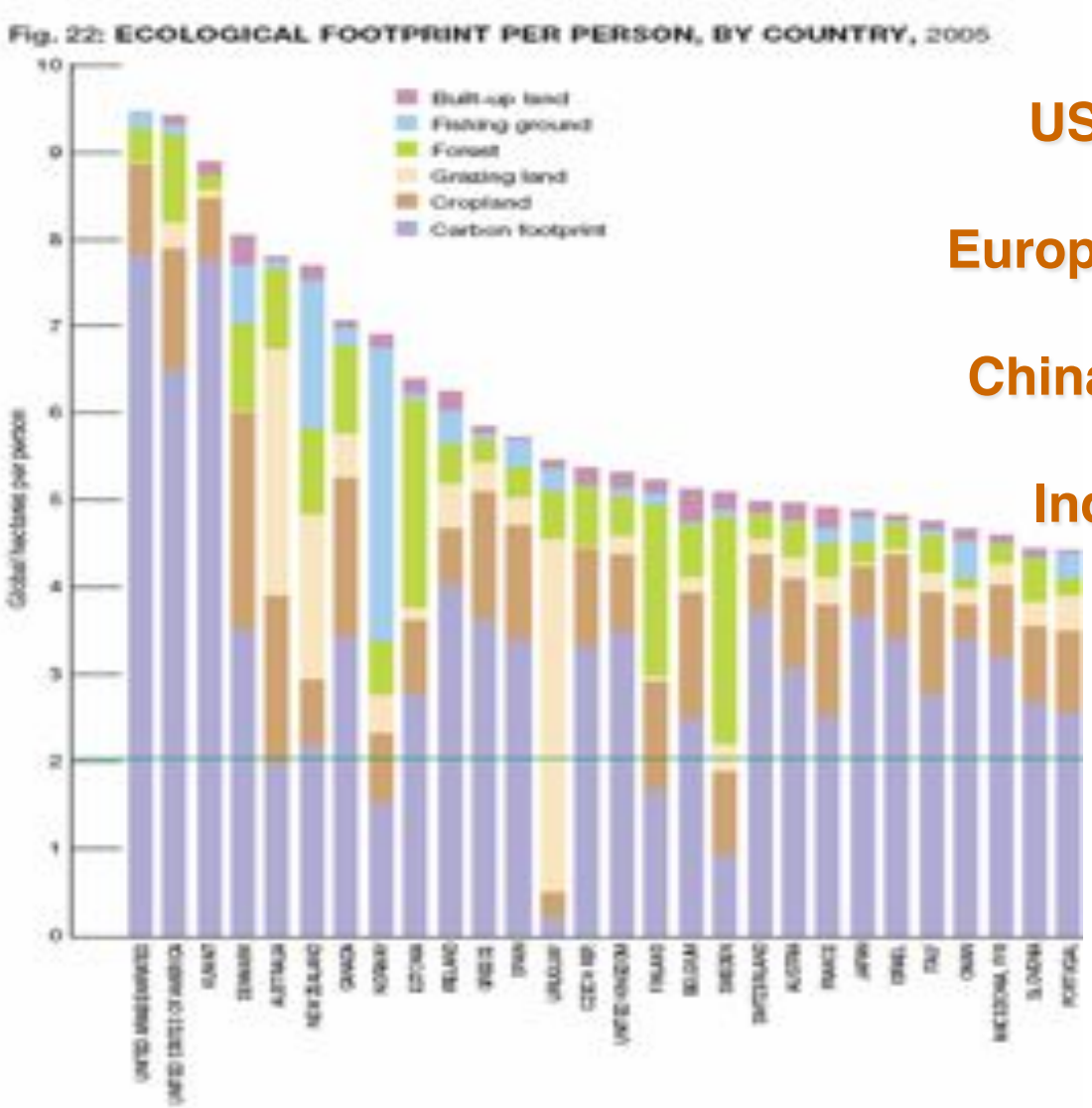
Natural Capital
自然资本–生命地球指数



Our Global Impact
人类的影响–人类生态足迹



按国别人均生态足迹



USA : 5 planets

Europe: 3.5 planets

China: 1.01 planets

India : 0.9 planet

Average as of today

= 1.3 planets

THE WEEKLY SHOPPING
每周购物

GERMANY 德国
BHUTAN 不丹
CHAD 乍得
China? USA?

2035年，我们将需要两个地球 ！

by 2035, we will need a second planet !

Members

- 1,156 Members worldwide from over 160 countries:

✓States: 87
✓Govt. agencies: 117
✓National NGOs: 818
✓Int. NGOs: 101
✓Affiliates: 33

- Over 60 Regional and National Committees

Secretariat

Regional Programmes

- Asia
- West Asia
- Europe
- West and Central Africa
- Southern and Eastern Africa
- Meso America
- South America
- Oceania
- North Africa

Director General & Corporate Functions

Global Programmes

Biodiversity Conservation:
- Species & KBA
- TRAFFIC
- Protected Areas
- World Heritage

Nature-based Solutions & Rights:
- Forest & Climate Change
- Marine and Polar
- Water & Food Security
- Ecosystem Based Adaptation
- Economics
- Business and Biodiversity
- Gender
- Social Policy

Policy, Programme & Capacity Development:
- Environmental Law
- Policy
- Science & KM
- Planning, M&E

Commissions

- 11,000+ voluntary experts in 6 thematic groups:

CEC
CEESP
CEM
SSC
WCPA

IUCN Programme 2013-16:
(i) Valuing and conserving biodiversity; (ii) Governing nature's use and sharing its benefits; (iii) Deploying nature-based solutions to climate, food and economy.

THE 2013-16 PROGRAMME

The World Conservation Congress

Forum

- *500+ events in 5 days;*
  (workshops, knowledge café, posters, conservation campus)
- *Forum aligned with the proposed IUCN Programme 2013-2016;*
  (each day will focus on one of the thematic areas of the Programme)
- *Each day will end with a high-level debate on the issue of the day;*
  (World Leaders Dialogues)

Members Assembly

- **Adopting a 4-year programme of work and associated financial plan**
- **Defining IUCN policy by voting on motions**
- **Electing the Union's governing council**

Agenda Overview 2012 World Conservation Congress (Jeju, Republic of Korea, September 2012)

	Wed 5th	Thu 6th	Fri 7th	Sat 8th	Sun 9th	Mon 10th	Tue 11th	Wed 12th	Thu 13th	Fri 14th	Sat 15th
Morning	Commission meetings and Council meeting	Commission meetings	8:30 – 16:30 Forum on "Nature-based solutions to climate change"	8:00-10:30 1st Sitting: "Nature-based solutions to climate change"	8:30-10:30 2nd Sitting: "Nature-based solutions to food security"	8:30-10:30 3rd Sitting: "Nature-based solutions to social and economic development"	8:30-10:30 4th Sitting: "Effective and equitable governance of nature's use"	8:30-10:30 6th Sitting: "Valuing and conserving nature"	Excursions	8:30-13:00 9th Sitting: Finances of IUCN 2009–2012 Programme and Financial Plan 2013-2016 Appointment of External Auditors Amendments to the IUCN Statutes Report of the Governance Committee	8:30-13:00 11th Sitting: Discussion and adoption of Resolutions and Recommendations Report of the Credentials Committee
				11:00 – 16:30 Forum on "Nature-based solutions to food security"	11:00 – 16:30 Forum on "Nature-based solutions to social and economic development"	11:00 – 16:30 Forum on "Effective and equitable governance of nature's use"	11:00 – 16:30 Forum on "Valuing and conserving nature"	11:00-13:00 7th Sitting: Reports of the President/ Council and the Director General			
Afternoon		16:00-17:30 Opening of the WCC	17:00 – 18:30 WLD Nature+ Climate	17:00 – 18:30 WLD Nature+ food	17:00 – 18:30 WLD Nature+ development	17:00 – 18:30 WLD Nature+ People & governance	17:00–18:30 WLD Nature+	14:30-19:00 8th Sitting: Commission reports and mandates Presentation and election of candidates for President, Treasurer, Commission Chairs and Regional Councillors		14:30-19:00 10th Sitting: Discussion and adoption of Resolutions and Recommendations	14:30-15:30 12th Sitting: Closing
Evening		Host Country Reception	Forum (Ctd) Member mtgs Contact grps	Forum (Ctd) Member mtgs Contact grps	Forum (Ctd) Member mtgs Contact grps	Forum (Ctd) Member mtgs Contact grps	19:00-20:00 5th Sitting: Medals and Awards	Contact grps			

Forum Members' Assembly World Leaders Dialogue

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Thank you!

Kamsa hamnida!

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CONSERVATION
CONGRESS
JEJU 2012

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