

Short history of Hustai National Park

- History Przewalski horse or Takhi
- 1977: Foundation Przewalski Horses was founded
- 1980: Takhi breeding in semi reserves
- 1988: Expeditions steppe areas in Russia/Mongolia
- 1990: Cooperation with MACNE
- 1992: Takhi return to Mongolia
- 2010: 250 Takhi, 90% wild born
- Success, why? Application of 12 principles Ecosystem Approach





Principle 1: The objectives of management of land, water and living resources are a matter of societal choice

- Horse based cultural identity of Mongolia
- Maintenance of Public Awareness
 - Local
 - National
 - International











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- Horse based cultural identity of Mongolia







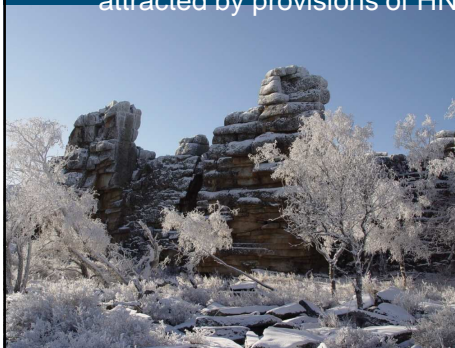
Principle 2: Management should be decentralized to the lowest appropriate level

- Ministry delegated management to NGO: HNP Trust
- Buffer Zone Council for surrounding area
- Strategic decisions by the Board of HNP Trust
- Operational decisions by Park Director and his team



Principle 3: Ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems.

- HNP is the local water tower
- Illegal grazing inside park because of overstocking outside its borders. *Otor* as a means to control
- Control of installation of immigrant herdsmen in Buffer Zone, attracted by provisions of HNP



Principle 3: Ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems.



Principle 4: Recognizing potential gains from management there is usually a need to understand and manage the ecosystem in an economic context.

Poverty alleviation:

- Employment opportunities in the park
- Income generation (e.g. vegetable gardening, cheese factory etc.)
- Tourism development
- Disaster preparedness (*Dzud*)



Principle 4: Recognizing potential gains from management there is usually a need to understand and manage the ecosystem in an economic context.



Principle 5: Conservation of ecosystem structure and functioning, in order to maintain ecosystem services, should be a priority target of the ecosystem approach.

Ecosystem Research:

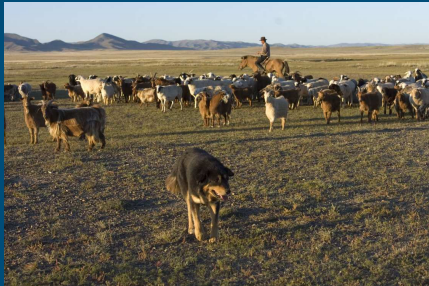
- Abiotic components:
 - Hydrology/meteorology interaction
- Biotic components:
 - Vegetation/herbivore interactions (forests, grasslands)
 - Predator/prey interactions (wolves, wildlife, livestock)



Principle 6: Ecosystems must be managed within the limits of their functioning.

Carrying capacity evaluations:

- Takhi
- Wolves (livestock guarding)
- Tourism
- Livestock grazing in buffer zone



Principle 7: The ecosystem approach should be undertaken at the appropriate spatial and temporal scales.

- Maral migration routes blocked
- Small group of Argali now permanently in H
- Tuul River: River Basin Management needs



Principle 8: Recognising the varying temporal scales and lag effects that characterise ecosystem processes, objectives for ecosystem management should be set for the long term.

- Technical sustainability: "achieved"
- Socio-economic sustainability: "achieved"
- Institutional sustainability: *Not yet fully secured*



Principle 9: Management must recognise that change is inevitable.

- Impacts of Climate Change?
 - Ground water table is lowering
 - Desert indicators appear
 - Forests are drying out and streams provide irregular water or dry out
- Application of precautionary principle
- Long-term Monitoring



Principle 10: The ecosystem approach should seek the appropriate balance between, and integration of conservation and use of biological diversity

- Unesco Biosphere Reserve with Zoning Plan: core area, tourism zone, limited use zone, bufferzone.
- Forest exploitation and hunting presently to be forbidden (incl. buffer zone)
- Some potential for medical plants
- Rational grazing to be applied



Principle 11: The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.

- Takhi Field Station
 - HNP research unit
 - Scientific council
 - Universities from Mongolia, The Netherlands, Japan, etc.
 - Seminars, workshops, conferences
- Meetings with buffer zone families
- Study into traditional nomadism



Principle 11: The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.



Principle 12: The ecosystem approach should involve all relevant sectors of society and scientific disciplines.

- Across sectors of society:
 - Protection Unit cooperates with the police
 - Management cooperates with government and donors
 - PR unit works with religious authorities, rotary, press
 - Tourism Unit works with tour operators
- Across scientific disciplines
 - Emphasis on natural sciences
 - Human sciences (sociology, anthropology)



