

# Grasslands of the world

## Supergrasssss

**Adaptable:** Can grow in infertile soils very low in essential plant nutrients (like phosphorous and nitrogen) and flourishing in drought prone areas.

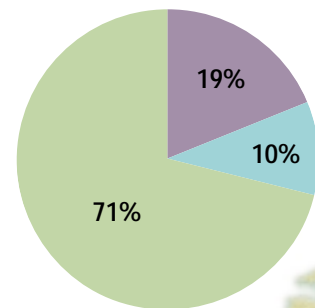
**Efficient:** As temperatures (sunlight intensity) rises photosynthesis is inhibited in most plants. Not in grasses. While other plants use a C3 metabolism for photosynthesis, grasses use a C4 one, which is more efficient in absorbing CO2, photosynthesizing in high temperatures and conserving carbohydrates.

**Tough:** More adaptable to dry periods than most trees.

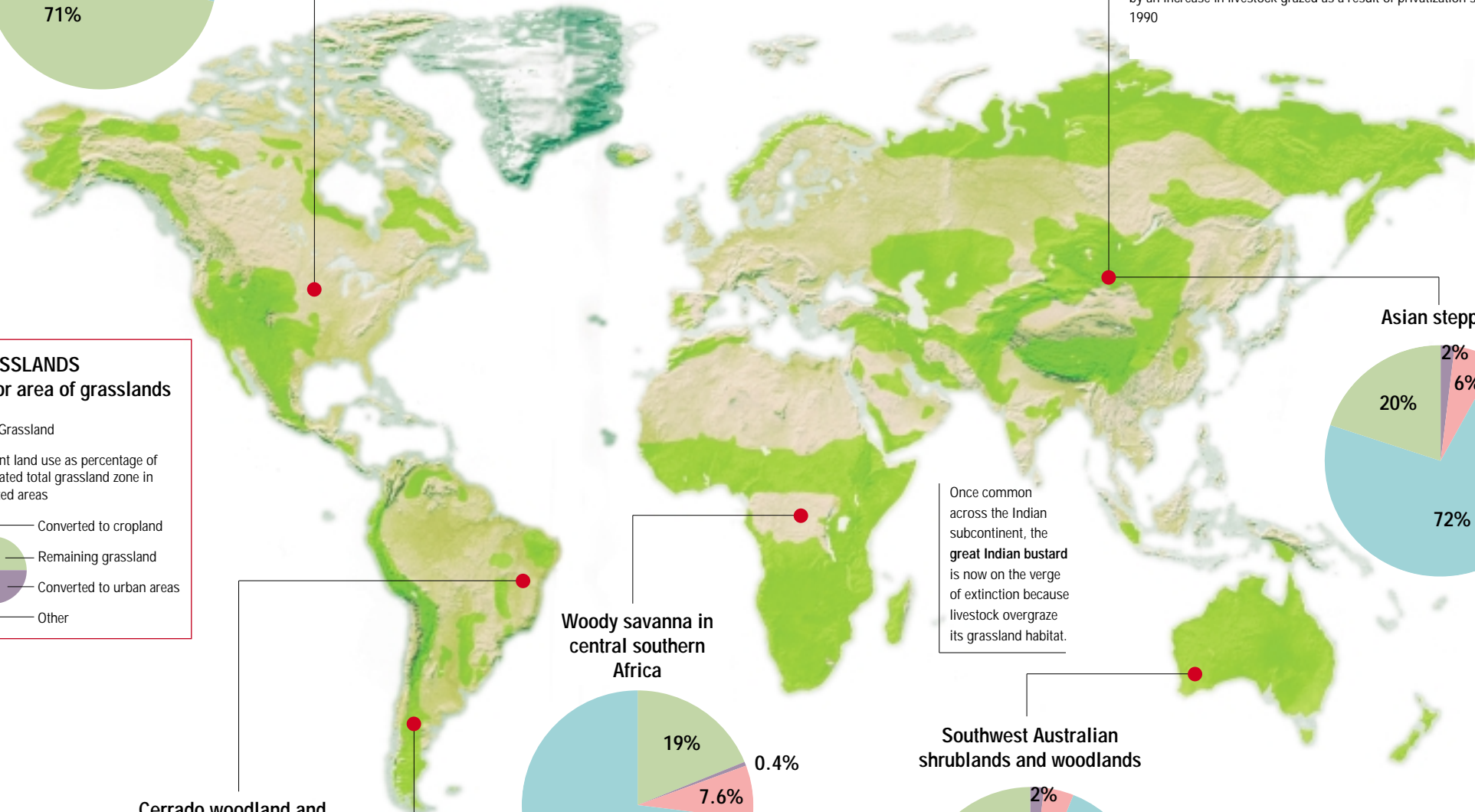
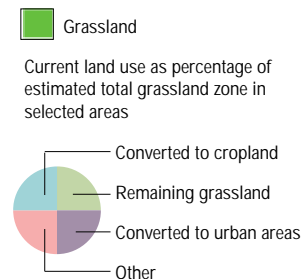
Grasses can exist completely underground during drought as small, nearly inert rhizomes, waiting for the right conditions to sprout.

**Fast:** Grasses also have the advantage of speed: plants establish from seed within only a matter of weeks, while tree seedlings remain fragile and vulnerable for years.

Tallgrass prairie in USA

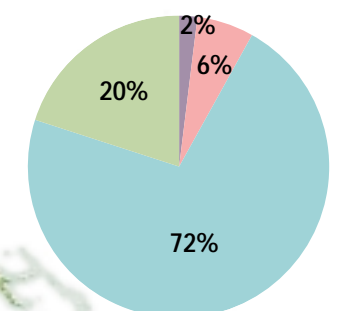


GRASSLANDS  
Major area of grasslands



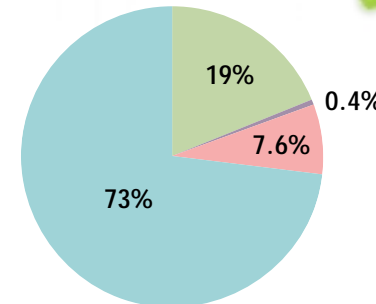
The grassland of Asia's High steppes supports around 30 million livestock, many of which are grazed on a nomadic system. However, over the past 50 years Russian and Chinese herders have been encouraged to adopt more sedentary grazing methods mixed with arable farming. As a result, the fragile ecology of their grassland has been unbalanced, and around 75% has been degraded. Although the grassland in Mongolia is in better condition it is also now threatened by an increase in livestock grazed as a result of privatization since 1990

Asian steppes



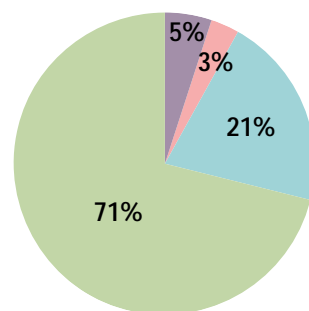
Once common across the Indian subcontinent, the **great Indian bustard** is now on the verge of extinction because livestock overgraze its grassland habitat.

Woody savanna in central southern Africa

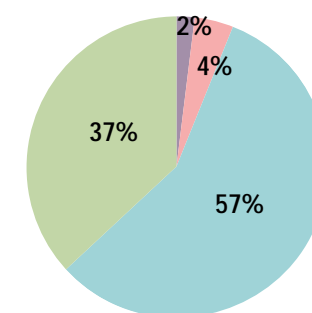


The dry **Patagonian steppe** in Argentina hosts abundant wildlife, including the endemic wild llama, the "guanaco." Human settlement is limited to "estancias" (ranches) and a few small towns. Its aridity leaves the Patagonian steppe vulnerable to overgrazing by sheep and goats, which are turning some areas into desert. Pumas are hunted, often illegally, because they prey on livestock.

Cerrado woodland and savanna in Brazil



Southwest Australian shrublands and woodlands



Map redrawn from *The Atlas of Endangered Species*, Earthscan Publications Ltd, London, 2002