



Centrum pro výzkum
toxických látek
v prostředí

Ekologická stopa



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Inovace a rozšíření výuky zaměřené na problematiku životního prostředí na PŘF MU (CZ.1.07/2.2.00/15.0213)
spolufinancován Evropským sociálním fondem a státním rozpočtem České republiky

Ekologická stopa

- účetní nástroj pro počítání ekologických zdrojů
- různé kategorie lidské spotřeby jsou převedeny na plochy biologicky produktivních ploch, nezbytné k zajištění zdrojů a asimilaci odpadů
- dnes $11,2 \cdot 10^9$ ha biologicky produktivní plochy
- lidstvo využívá $16,2 \cdot 10^9$ ha biologicky aktivní plochy

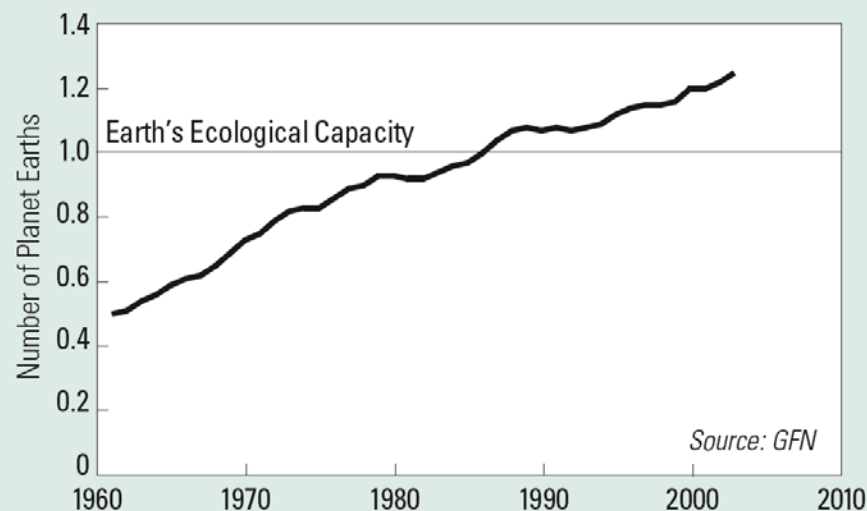
**Průměrná ekologická stopa/obyvatele
= 2,6 gha (globální hektar)**

Biokapacita Země/obyvatele = 1,7 gha!

**= spotřebováváme zásoby
= žijeme na dluh budoucích generací
= neudržitelný způsob života !**



Figure 3. Humanity's Ecological Footprint, 1961–2003



Ekologická stopa – výpočet

- výpočet ekologické stopy vychází z různých kategorií „věcí“ a „činností“, které patří k životnímu stylu jedince
 - pro danou věc/činnost vypočtena ekologicky produktivní plocha
 - jedna položka spotřeby je většinou závislá na více typech produktivní plochy (orná půda, pastviny, zastavěná plocha...).
 - výsledkem je matice údajů (dílčích ekologických stop), které se v jednom směru liší podle typu lidské spotřeby a ve druhém směru podle typu využívané produktivní země

	Zastavěné plochy	CO ₂ země	Orná půda	Pastviny	Lesy	Vodní plochy	Celkem
Potraviny							
Bydlení							
Doprava							
Zboží							
Služby							
Celkem							Výsledek

Sports events leave a giant 'ecological footprint'

› 10:00 16 April 2005 by [Jon Copley](#)

LARGE sporting events have an "ecological footprint" thousands of times the size of the pitches they are played on. That's according to researchers who have calculated a sporting event's environmental impact for the first time.

Andrea Collins of Cardiff University in the UK and her colleagues looked at the 2004 soccer FA Cup final, held at Cardiff's Millennium Stadium. They converted the energy and resources used on the day of the match into an ecological footprint - the hypothetical area of land required to support the use of those resources. Energy consumed, for example, was converted into the area of forest needed to soak up the carbon dioxide generated in its production, while food consumption was represented as the amount of farmland needed to make it. This method gave the match a footprint of 3051 hectares.

More than half the footprint came from transport. The 73,000 supporters collectively travelled nearly 42 million kilometres to reach the match. Fewer than half travelled by car, but car use generated 68 per cent of the transport footprint. If those fans had travelled by bus instead the footprint would have been 399 hectares smaller.

Food was the second-largest contributor, weighing in at 1381 hectares for the 36,500 snacks consumed. The researchers say this could easily be reduced: for example, substituting all the beef with chicken would have taken 428 hectares off the footprint.

The impact of waste disposal, at 146 hectares, was surprisingly low, says Collins. Recycling would have trimmed this by 39 hectares.

Collins argues that the footprint is a useful management tool to assess the effect of activities. "We'd like to see organisations and policy makers look at the results and hopefully instigate measures to reduce the impact," she says.

"It's in principle a very good idea," says environmental statistician and self-styled "sceptical environmentalist" Bjorn Lomborg of the University of Aarhus in Denmark. "But how do you translate energy used into an area?" The size of the footprint depends on what assumptions you make. For example, calculating the land in terms of windmills to generate the energy rather than forest cover to soak up CO₂ would give a much smaller footprint.

Editorial: The blame-China syndrome

› 18 June 2008

› Magazine issue 2661. [Subscribe and save](#)

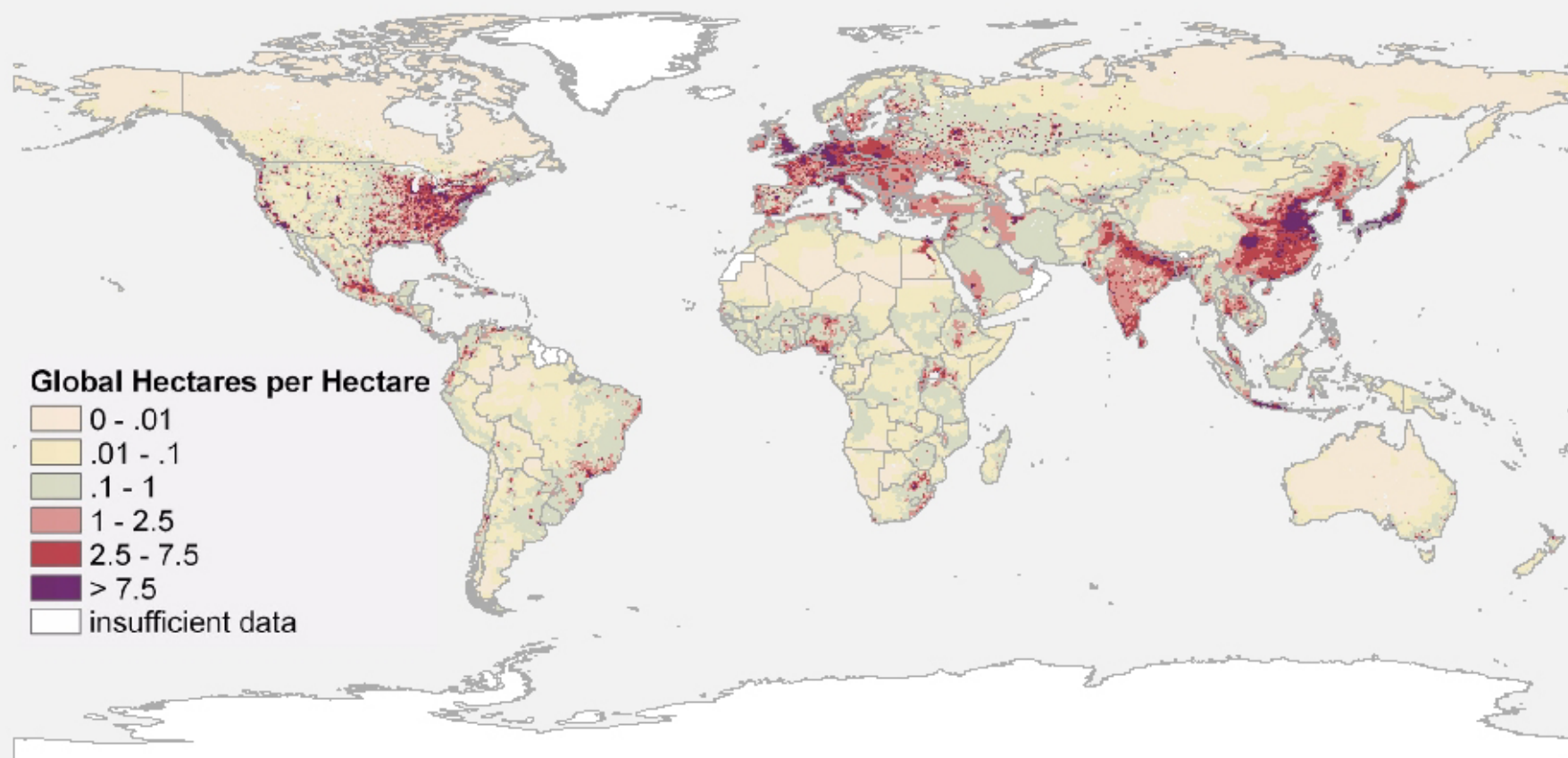
IT'S open season on China, newly installed as the world's largest emitter of carbon dioxide. Last week the Netherlands Environmental Assessment Agency said China's economy was responsible for two-thirds of the global increase in CO₂ emissions last year. The week before, the environment group WWF calculated that China uses 15 per cent of the world's resources. It builds two coal-fired power stations a week, manufactures half the world's cement and is the world's largest importer of tropical timber.

The charge sheet is long, and mostly true. But remember that 1 in every 5 of the planet's citizens is Chinese. Looked at in this light, the stats do not look half as bad. On average, the CO₂ emissions of a Chinese person are half those of a European and a quarter those of an American or Australian. Per capita, China's ecological footprint is below the world average.

Yes, China burns a lot of coal. But last year it also deployed more wind turbines than any other country. Its recycling businesses are among the world's largest. It leads the world in aquaculture, helping to protect surviving ocean fisheries.

Should we at least blame China for its huge population? Go carefully. Its population would be much higher but for its sometimes coercive efforts to cut birth rates. Ah yes, China's dodgy human rights record. We don't like that either. Rightly so, perhaps. But we can't have it all ways.

Ekologická stopa světové rozložení



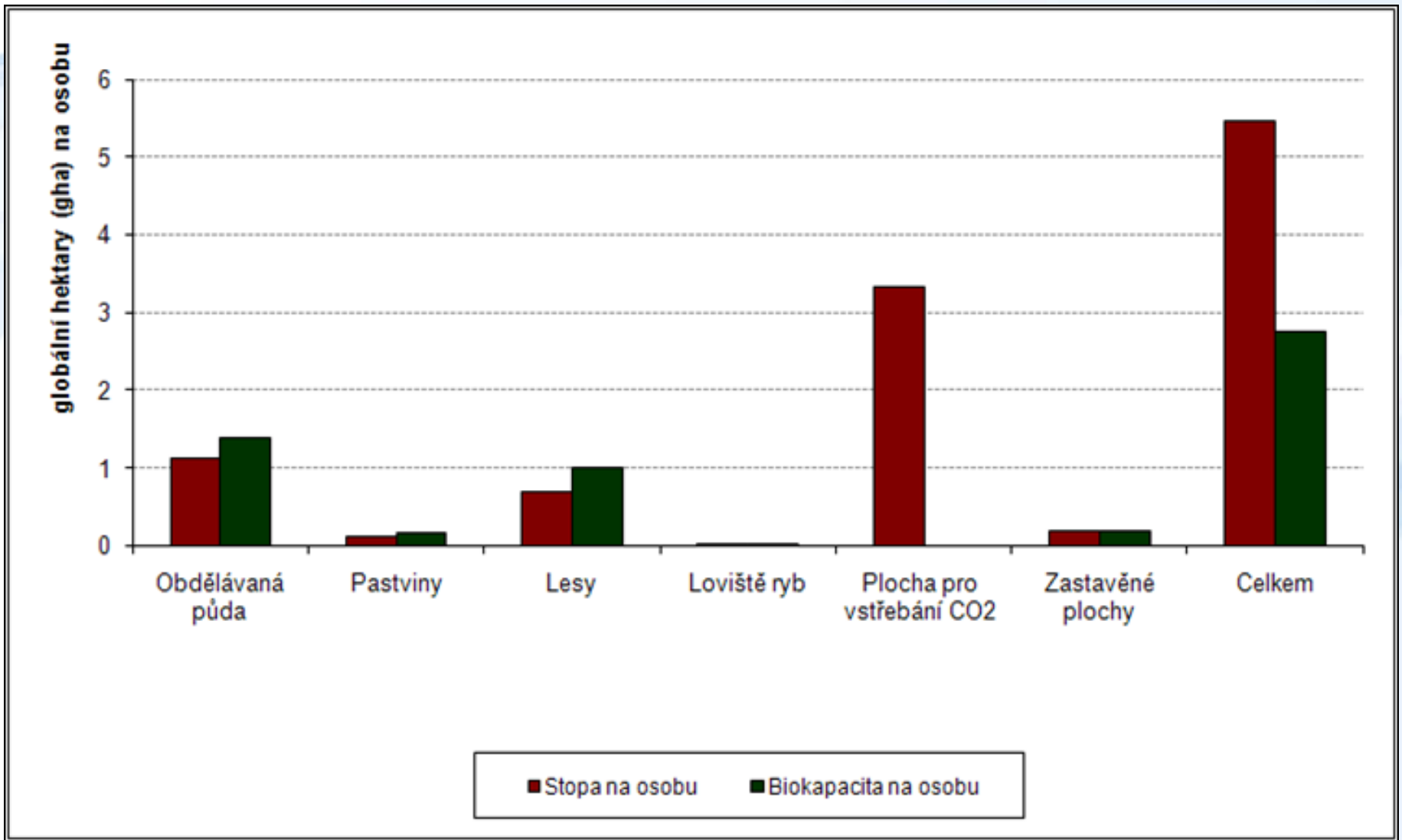
Percent of Earth Used: 121%

2001

Source: Global Footprint Network & SAGE - UW Madison



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Srovnání stopy a dostupné biokapacity pro součásti ekologické stopy v ČR (2005)



Ekologická stopa - srovnání

year 2003	Population (millions)	Total Ecological Footprint (global ha/person)	Ecological deficit (-) or reserve (+) (global ha/person)
World	6 301,5	2,2	-0,5
North America	325,6	9,4	-3,7
Canada	31,5	7,6	6,9
United States of America	294,0	9,6	-4,8
European Union (EU25)	454,4	4,8	-2,6
Austria	8,1	4,9	-1,5
Czech Republic	10,2	4,9	-2,3
France	60,1	5,6	-2,6
Germany	82,5	4,5	-2,8
Hungary	9,9	3,5	-1,5
Latvia	2,3	2,6	4,0
Netherlands	16,1	4,4	-3,6
Poland	38,6	3,3	-1,4
Slovakia	5,4	3,2	-0,5
Sweden	8,9	6,1	3,5
United Kingdom	59,5	5,6	-4,0

year 2009	Population (millions)	Total Ecological Footprint (global ha/person)	Ecological deficit (-) or reserve (+) (global ha/person)
World	6 592,9	2,6	-0,8
Africa	942,5	1,4	0,1
Asia	3 983,9	1,5	-0,8
Canada and USA	335,5	8,7	-3,0
Canada	32,6	5,8	11,3
United States of America	302,8	9,0	-4,6
Europe	731,3	4,5	-1,5
Austria	8,3	4,9	-1,9
Czech Republic	10,2	5,3	-2,7
France	61,3	4,6	-1,8
Germany	82,6	4,0	-2,2
Hungary	10,1	3,2	-0,6
Latvia	2,3	4,6	2,6
Poland	38,1	3,9	-2,0
Slovakia	5,4	4,9	-2,3
Norway	4,7	4,2	1,9
United Kingdom	60,7	6,1	-4,5

- [srovnání s ČR](#)
- [video](#)

