

Do the activities of forest pedagogics fall onto fertile soil?

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- **Do the Czechs go to the forest at all?**
- **How many Czechs are actively interested in the environment?**
- **How much time people spend outdoors?**





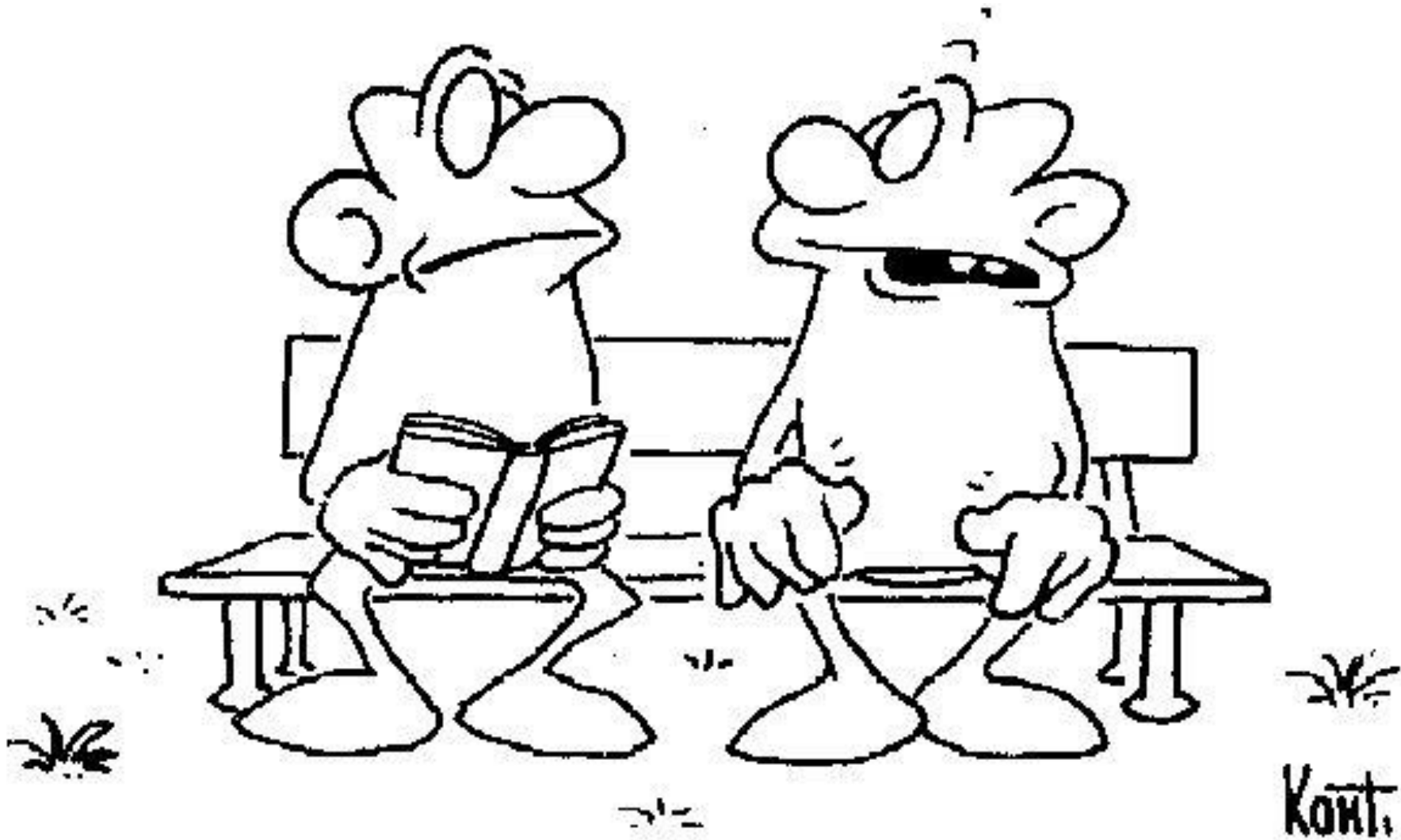
- **Why is the contact of people with nature diminishing?**
- **Why do children detest nature?**
- **What do children gain from the activities of forest pedagogics?**





Do the Czech people visit forests?





„Tak bych se šel projít do lesa, ale nechce se mi.“

I feel like going for a walk in the forest, but I do not want to.



Yes, and a lot!

STEM/MARK 2016



Do the Czech people visit forests?

On average 20–25 visits per capita a year

68 % of Czechs pick mushrooms

43 % of Czechs pick blueberries

35 % of Czechs pick raspberries and blackberries

Each household collects ca. 5 kg of mushrooms and nearly 2 kg of blueberries per year.



A decorative illustration of a green vine with several heart-shaped leaves hanging down from the top left corner of the slide.

How many Czechs are actively interested in the environment?

Masaryk University, 2016





How many Czechs are actively interested in the environment?

Nearly 1.5 million inhabitants

(sign petitions, tidy up forests or streams, persuade acquaintances, ...)

Of these, 420 000 embark in environmental issues, being concerned with nature, protection of species and wilderness, wanting to have the clean environment.





How many Czechs are actively interested in the environment?

Others are active in enhancing public spaces and landscape, contributing primarily by manual work (litter collection in the forest or elsewhere in the open accounts for up to 1/3 of activities), helping animals in need etc.

Game keepers constitute another involved group. Many people are interested in healthy food or are local patriots.





Suggestions?

It would be possible to address further 12 % of population (880 000 inhabitants) – preferentially females who become more often involved out of compassion or a possibility to get together rather than for rational reasons.

Forest pedagogics could respond more to the concern in healthy food (forest fruits), in the best place for Czech wilderness and rare species, forest as a stabilizer of water cleanliness and clean environment in general.



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Wildlife protection by the eyes of the Czech public

Krajhanzl et al., MUNI, 2015





What are risks in the conservation of wilderness?

65 % forest fires

65 % forest harvesting

64 % disappearance of forests due to urbanization

59 % amount of harvested forests

57 % methods of forest harvesting

51 % loss of old and grown-up trees

50 % disappearance of forests because of agriculture

49 % genetic modification of tree species

48 % intensive game hunting





Who should be responsible for wildlife protection?

96 % Ministry


.

.88 % Foresters

.

.50 % Individuals and their families





*What area is covered by
forests in the Czech
Republic?*

36 % (33.9 %)






*What area would be good
to be covered by forests?*

41 %





*What area would be good
to be covered by
wilderness in the Czech
Republic?*

13 %





Where the wilderness could be extended in the Czech Republic?

60 % former military domains

-
-

35 % forests at the cost of forest
management

-

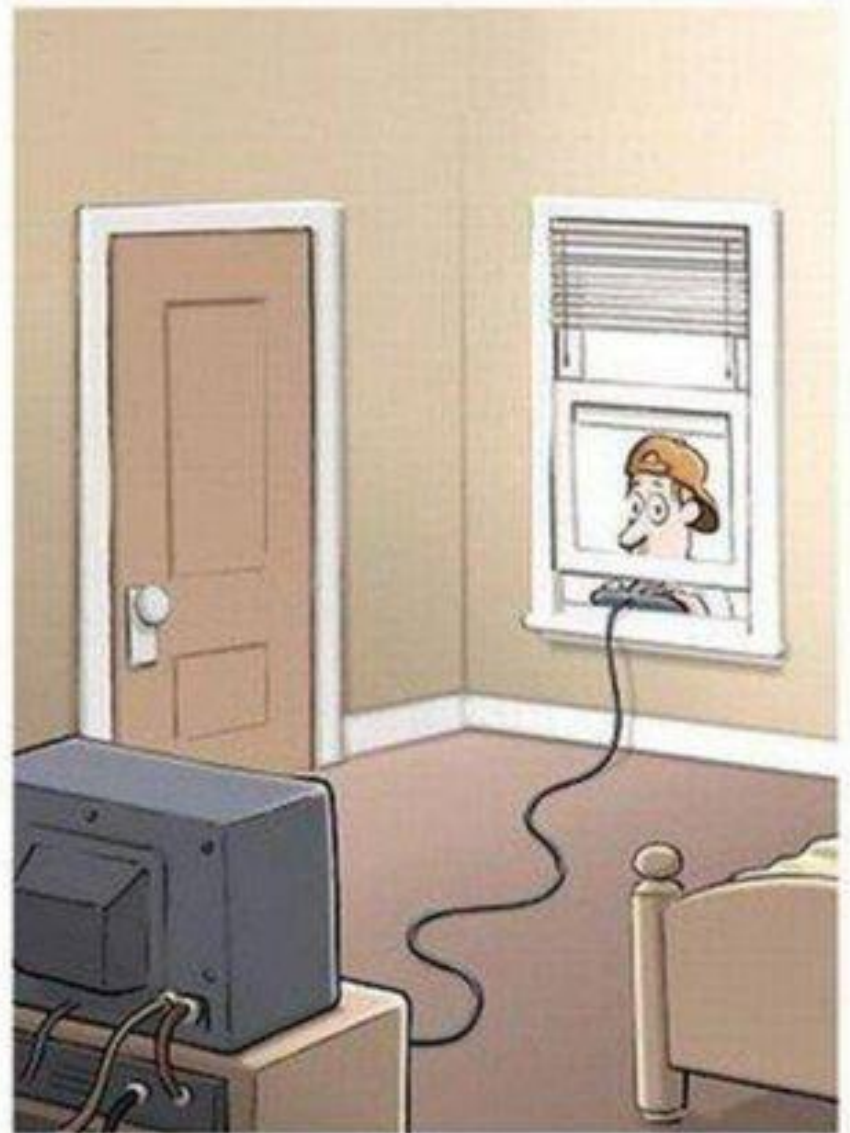


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How much time people spend outdoors?

National Academy of Science (USA), Pergams,
Zaradic 2007, Krajhanzl 2017, Strejčková 2000





Such a nice weather! I really want you to go and play outdoors!

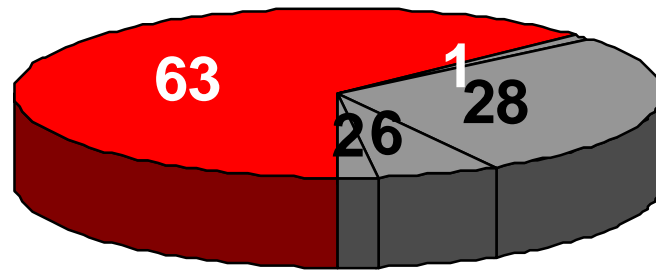
How much time people spend outdoors?

- *Research studies indicate that today's children spend about 2–4x less time outdoors than the generation of their parents*
- *In the U.S.A., children spend outdoors voluntarily about 30min/week*
- *Families visit protected landscape areas by 20 % less than in the mid-1980s*



Global trends

Environments where urban people spend their time:



At work indoors	63 %
At home indoors	28 %
In the means of transport	6 %
In other rooms indoors	2 %
Outdoors	1 %

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How much time people spend outdoors?

12 % of Czechs state they are often outdoors



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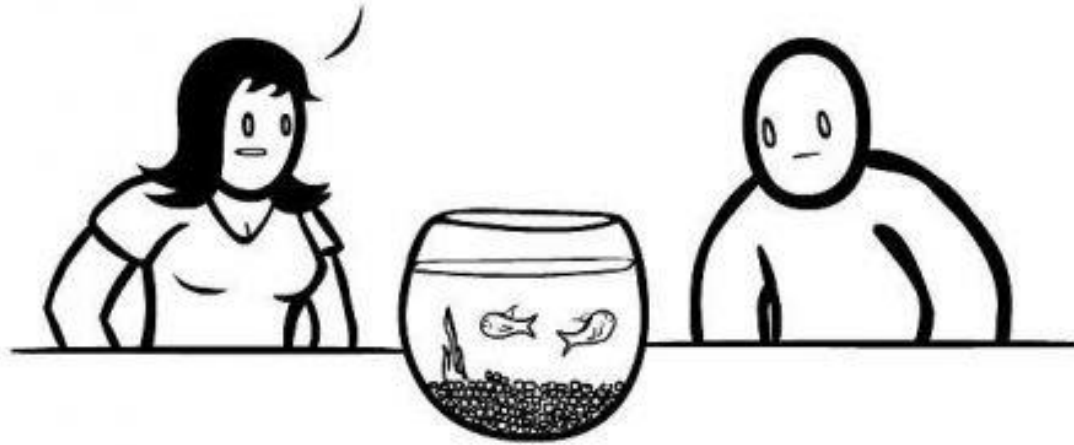
Why is the contact of people with nature diminishing?

Clear and demonstrated correlation:

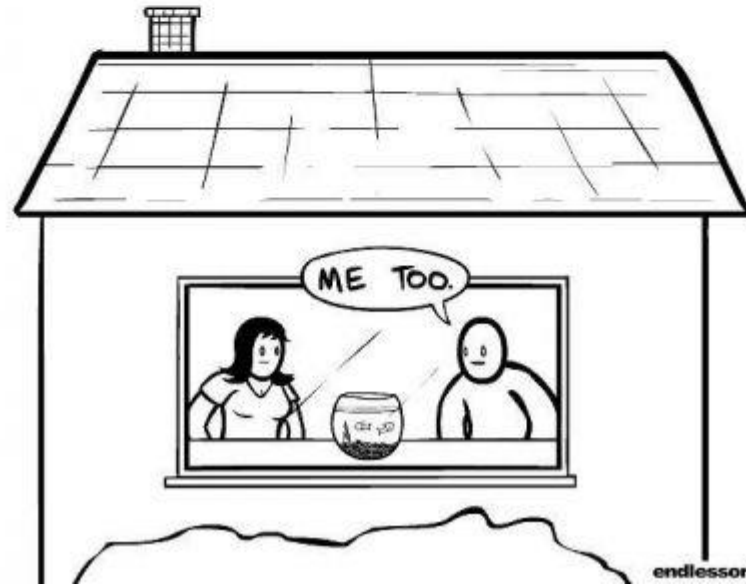
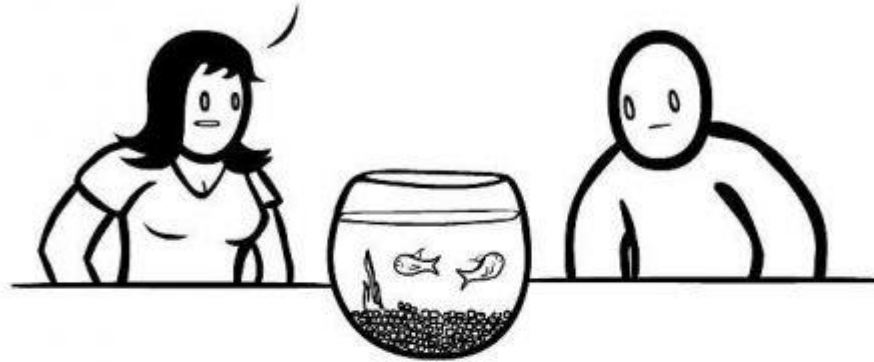
The more time is spent in the virtual world, the less time is spent in the natural and real world.



SOMETIMES I WONDER
HOW THEY DON'T GO CRAZY
TRAPPED IN THERE.



SOMETIMES I WONDER
HOW THEY DON'T GO CRAZY
TRAPPED IN THERE.



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Why is the contact of people with nature diminishing?

Children spend 54 hours per week with technologies
= up to 75 hours of media stimuli



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*Why is the contact of people
with nature diminishing?*

75 hours of media stimuli

vs.


0.5 hour voluntarily spent outdoors





Why is the contact of people with nature diminishing?

Why do children spend less time outdoors?

- Interesting things happen not outdoors but on-line
 - Parents are more worried
 - Traffic is heavier
 - They have more co-curricular activities
 - They cannot meet age-mates outdoors any longer
- 



Suggestions?

- *Return streets to people so that they become spaces for meetings, get-togethrs and play again*
- *Seek limits for using electronic novelties so that they help us in the real world rather than také us away therefrom.*





Why do children detest nature?

Smékal 2004, Valkounová, Vostradovská 2005, Winter, Koger 2009, Milward Brown 2004, Median 2004, Nevers, Billmann-Mahecha 2003, Clayton, Myers 2009, Kaplan, Thomashow 2002





„To je nápad, hladit včelu!“

It is so silly to stroke a honeybee!



Why do children detest nature?

- It is to certain extent a natural reaction*
- Which demonstrably relates to experience with staying outdoors/in the forest*





Why do children detest nature?

- Children with experience in the forest feel comfortable*
- In others, distrust grows with the increasing age and they do not feel comfortable in the forest*



They said about nature

"...well, such running in the woods is in fact out of fashion in this time of computers.

On the other hand, going down the river or so is quite good." (Sasha, 13 years)

They said about nature

"Nature is sort of forgotten nowadays....."

(Sasha)

Children about nature

According to German research, a number of school children below twelve years of age believe that trees have a capability of feeling pain, experience feeling of happiness or despair.

Children about nature

Czech research among primary school children:

With the increasing age, most pupils are less willing e.g.

to go for an excursion with the forester to learn more "about the forest, plants growing and animals living in the Czech Republic".

Similarly, general interest in hiking in the open is decreasing.

Children about nature

American study: *the aesthetic value of nature temporarily decreases for pubescents.*

Australian study: *pubescents highly value places built by man "pulsing with life" such as department stores, pedestrian zones and the like. They are not so much interested in places in the open.*

Children about nature

Older pupils at primary schools feared snakes, stinging insects, ticks and spiders more than the youngest ones.

Nevertheless, the same research brought different results.

Pubescent naturephobia and annoyance with nature is not developmental necessity.

today's children... *everyday world*



- **what they are talking about**
7 - 10 years

%

7 - 10 years

SPORTS	43
Friends	36
PC, PC games	33
School, teachers	27
Films	26

FRIENDS	55
School, teachers	50
Opposite sex	32
Plans for afternoon, weekend	32
Fasion, clothes, cosmetics	23

11 - 14 years

11 - 14 years

PC, PC games	45
Sports	43
Opposite sex	35
Films	24
Plans for afternoon, weekend	24

OPPOSITE SEX	59
Fasion, clothes, cosmetics	50
School, teachers	37
Friends	32
Music	32



NEMĀM NIC PROTI STEZKE ODVAHY, ALE JĪT
MIMO DOSAH WIFINY JE UŽ TROCHU MOC...

I have nothing against "the path of courage", but going out of wifi signal reach is really too much!

Today's children

Children do not take nature as an interesting framework for their activities

- It does not have enough attractiveness for them
- They do not connect nature with interesting activities
- Some children fear nature



Suggestions?

- *Take children out into the open nature as often as possible*
- *Work individually with children's worries and fears, dose the intensiveness of activities*
- *Describe the nature positively rather than telling children horrifying stories*
- *Offer children attractive activities to be performed in the forest*





Suggestions?



- *Pre-school children – link to the place, talking through animals*
- *Camping skills (basic school children)*
- *Care of plant, animal. Practical solution of a local problem*
- *„No tragedy before Class 4 of primary school“*
- *Sense of humour, technical skills, debates, sincerity, courage, no emphasize to superiority (lower secondary school children)*
- *Experiential pedagogics, adventure therapy*





What do children gain from the activities of forest pedagogics?

Činčera 2016, Bell 2001, McGonigal 2011, Gifford 1996, Recherche in Science and Technological Education 2017, Nickerson 2002, Geller 1986, Nader 1991, Hart, Nolan 1999, Children & Nature Network 2017, Gardner, Stern 1996, Rickinson 2004, Bahar 2013, Erdogan 2015, Ferreira 2012, Johnson 2014, American Institute for Research 2005, Wiseman 2004



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What do children gain from the activities of forest pedagogics?

The more familiar are children with the forest, the more gentle they will treat it as adult people.



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What do children gain from the activities of forest pedagogics?

The distinct correlation between knowledge and behaviour has not been scientifically demonstrated so far.





What do children gain from the activities of forest pedagogics?

The otherwise common K-A-B model of learning was not corroborated

-Attitudes not always correlate with knowledge

-The link between knowledge and conduct is statistically non-significant



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What do children gain from the activities of forest pedagogics?

The influence of knowledge on attitudes is only minimal.

The influence of attitudes on behaviour is only partial.



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What do children gain from the activities of forest pedagogics?

Obstacles:

- Participant's home background
- External motivation and limitations
- Values and ideology
- Opinions of neighbours and relatives
- Knowledge
- Attention (relevance of measures)
- Wastage and savings



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What do children gain from the activities of forest pedagogics?

We would definitely wish that FP activities can change people's attitudes and behaviour to the forest/forestry.

However, that probably occurs on a much lower scale than we would wish.



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***What do children gain from
the activities of forest
pedagogics?***

**Even professional environmental
organizations fail in this effort.**



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What do children gain from the activities of forest pedagogics?

Gillford: Only 14 of 34 studies on educational programmes about the environment are positively effective.



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What do children gain from the activities of forest pedagogics?

Activities of forest pedagogics, too, often use the form of ad hoc meetings, workshops, public events etc.

Gifford asks whether these are not only "impressive circus with no result?".



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What do children gain from the activities of forest pedagogics?

Činčera: Positively effective of 70 studies about field lessons are only those, which deal with the long-term (5 days) education in the field.





What do children gain from the activities of forest pedagogics?

We do not even know whether the most effective way to change the behaviour of children leads through developing **skills** (as emphasized by education to sustainability), **attitudes** (typical of depth ecology or partly education about Earth) or **knowledge** (typical of environmental education).





What do children gain from the activities of forest pedagogics?

Long-term stay programmes (lasting several days) were demonstrated as effective (results of test better by 27 %).

Effectiveness of short-term programmes (up to 10 hours) is unmeasurable.






Suggestions?

- *The length of child exposure is crucial (forest camps, game management clubs, forest kindergartens).*
- *What one becomes fancy of and falls really in love with, the one will never hurt and tends to take care of.*
- *If a child becomes fancy of the forest and really falls in love with it, he/she will never do harm to it and will take care of it.*
- ***Let us not have unreasonable expectations***







Suggestions?

- *Sufficiently long lasting, well planned, reasonably taught and purposefully interlaced with the curriculum*
 - *Quality of prepared activities (captivation, engagement of participant, comprehensibility, programme adaptation, individualization of communication, concreteness of recommendations, clarification of pros and cons, creditability of pedagogue and environment)*
- 



Conclusions?

- *The fact that a child has knowledge about the forest/forestry does not mean that he/she will treat the forest with care.*
 - *It is clear, however, that what he/she becomes fancy of and falls in love with, will never do harm to and will take care of.*
 - *We probably do not have to set higher goals.*
- 

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***"It is better to light a little
candle than to curse the dark."***

Confucius



Pozitivní důsledky environmentální destrukce

Tý jo, moje alergie jsou pryč!



Positive consequences of environmental destruction: Vow, my allergies are all gone!