Ponor ogljika – kaj je to? To ni le znanstveni pojem, ampak gre za življenjsko pomemben proces, ki nas varuje pred uničujočimi učinki globalnega segrevanja. **J**e kot skriti heroj v boju proti podnebnim spremembam.



Slika 1: Neželena prihodnost našega planeta ([https://organicfarms.mystrikingly.com](https://organicfarms.mystrikingly.com/blog/the-future-of-organic-farming-in-uae-analysis-and-prediction))

**Pragozd – ponor ogljika**

V pragozdu, kjer tišina kraljuje,  
drevesa šepetajo, ko veter miruje,  
korenine se prepletajo v tleh,  
da ogljik ohranja nas pri močeh.

Pragozd, ponor, narava – naše srce,  
skupaj zaščitimo njihovo ime.  
Saj v gozdovih živi prihodnost sveta,  
v njih je moč, vredna zlata.

A če pragozd bo padel,   
svet bo propadel,  
ogljik bo šel v zrak, narava pa v znak.

Varujmo pragozdove, naš zeleni zaklad,  
če hočemo preprečiti svetovni propad.

Bujni pragozdovi iz atmosfere vsrkajo ogljik in ga shranijo v svojih rastlinah, tleh ali vodi. Ko pomislimo na **kočevski pragozd**, si predstavljamo tišino in skrivnostnost gozda, ki v svojem objemu hrani ogljik, sicer pa bi prispeval k naraščanju temperature na Zemlji. Ogljik je eden najpomembnejših elementov, brez katerega si sploh ne moremo predstavljati življenja na Zemlji. Z vsakim drevesom, ki raste v teh gozdovih, je nekaj več kot rast – to je **upanje** za naš planet.

Kočevska je najbolj gozdnata pokrajina v Sloveniji z 91 % gozdnih površin. Med temi gozdovi se skrivajo redki pragozdni ostanki, katerih skupna površina znaša 217 ha, kar predstavlja skoraj polovico vseh pragozdov v Sloveniji. Ti pragozdovi so ohranjeni, ker vanje človek ni posegal. Gozd, posebej na kraškem svetu predstavlja zaščito življenju, ki se skriva v njem. Varuje rodovitno prst, filtrira zrak, zadržuje vodo, blaži klimatske ekstreme, daje les in je dom številnim rastlinam in živalim. Kočevski pragozdovi so zaščiteni in dragoceni kot naravni procesi rojevanja in umiranja. Najbolj znana pragozdova sta Rajhenavski Rog in Krokar.

S skrbjo za pragozdove ne zaščitimo le dreves in rastlin, ampak zaščitimo sebe in prihodnje generacije pred uničujočimi učinki podnebnih sprememb. Fotosinteza igra pomembno vlogo pri zmanjševanju ogljikovega dioksida v ozračju. Rastline absorbirajo ogljikov dioksid, pri čemer vase vgradijo ogljik, kisik pa sprostijo nazaj v ozračje. Proces odvzema ogljikovega dioksida iz ozračja imenujemo ponor. Glavno vlogo pri vezavi ogljika (iz ogljikovega dioksida) na kopnem igrajo prav gozdovi. Na ta način pomagajo zmanjšati količino ogljikovega dioksida v ozračju, kar pomaga uravnavati podnebje in upočasniti učinke podnebnih sprememb. Brez teh naravnih ponorov ogljika bi se količina toplogrednih plinov v atmosferi še povečala, kar bi pospešilo globalno segrevanje.

Ljudje lahko s svojimi dejanji pozitivno in negativno vplivamo na delež ogljika. Ko se zgodijo naravne nesreče, ko so drevesa podrta in odmirajo, kadar gozd napade lubadar ali ga ljudje intenzivno izsekavamo, kar pomeni, da posekamo več, kolikor letno priraste, se zgodi obraten proces. Takrat začne ogljikov dioksid izhajati nazaj v ozračje*.* Gozd ni več ponor, temveč vir toplogrednega plina ogljikovega dioksida. Tudi požigi, bodisi zaradi kmetijskih dejavnosti bodisi zaradi ilegalnih dejavnosti, močno poškodujejo ekosisteme ter prekomerno obdelovanje tal, uporaba pesticidov in gnojil, kar vodi v degradacijo tal in zmanjšanje biotske raznovrstnosti. Zasaditev dreves na degradiranih območjih in podpora programom za obnovo gozdov pa lahko vpliva zelo pozitivno. Tako je tudi podpiranje in vlaganje v obnovljive vire energije, ki zmanjšujejo potrebo po fosilnih gorivih. Vsak lahko pomaga z zasaditvijo dreves na degradiranih območjih, ohranjanjem travnikov in zmanjšanjem obsega monokultur.

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Carbon sink, what is this? This is not just a scientific concept – it is a vitally important process, which protects us from the devastating effects of global warming. It's like a hidden hero in the fight against climate change.



Picture 1: The not wanted future of our planet (<https://organicfarms.mystrikingly.com>)

**Virgin forests – carbon sink**

In virgin forests, where silence reigns,

trees whisper while the wind rests,

roots are intertwining in the ground,

and carbon keeps us upright.

Virgine forests, intact nature - our heart,

together we shall protect their name.

The future of the world rests in these forests,

worth their weight in gold.

But if the forest falls,

The world too will fall,

Carbon will go into the air, and nature will recede.

Let us protect the virgin forests of ours, our green treasure,

to prevent global collapse.

Lush primeval forests absorb carbon from the atmosphere and store it in their plants, ground or water. When we think about Kočevje virgin forests, we imagine silence and the mystery of forests storing carbon in their embrace. Otherwise, even forests would contribute to the rise in the global temperature. Carbon is one of most important elements, without which we cannot even imagine life on Earth. Every tree that grows in these forests represents hope for the future of our planet.

Kočevsko with 91% of forest cover is the most forested area in Slovenia. These forests hide rare primeval forest remains, whose total area is 217 ha, which represents almost half of all primeval forests in Slovenia. These primeval forests have remained well-preserved because human has not interfered with them. Forests, especially in the karst terrain, act like a large umbrella, protecting the fertile soil, filtering the air, retaining water, mitigating climatic extremes, providing timber and natural habitat for a variety of plant and animal species. Virgin forests are protected – they are precious and valued for natural processes of birth and death occurring there. The most known primeval forests in Kočevsko are the Rajhenav Virgin Forest in Kočevski Rog and Virgin Forest Krokar.

By taking care of primeval forests, we are not only protecting trees, plants and animals, we are also protecting ourselves and future generations from the devastating effects of climate change. Photosynthesis plays an important role in reducing carbon dioxide in the atmosphere. Plants absorb carbon dioxide, store carbon and release oxygen back into the air. The process of taking carbon dioxide out of the atmosphere is called carbon sink. Forests are considered one of the best forms of natural carbon sequestration on land. In this way, they help reduce the amount of carbon dioxide in the atmosphere, which helps regulate the climate, thus slowing down the effects of climate change. Without these natural carbon sinks, the amount of greenhouse gases in the atmosphere would increase further, thus accelerating global warming.

Humans can either have a positive or negative impact on carbon content. When natural disasters happen, when trees fall and die, when the forest is attacked by the bark beetle or it is cut down intensively, which means it is cut down more than it grows each year, an inverse process happens and carbon dioxide is released back into the atmosphere. The forest is no longer a sink, but a source of the greenhouse gas carbon dioxide. Also, wild fires caused by agricultural activities or illegal activities severely damage forest ecosystems. Furthermore, the use of pesticides and fertilizers leads to soil degradation and biodiversity decline. Planting trees in degraded areas and supporting reforestation programs can have a very positive impact. In that way everyone can help.

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