

An aerial photograph showing a dense forest on the right side, with some trees showing early autumn colors. To the left of the forest are agricultural fields, including a bright green field in the top left and a large, dark, tilled field in the bottom left. A dirt road or path runs diagonally between the forest and the fields. A yellow rectangular box is overlaid on the image, containing the title text in a white, italicized serif font.

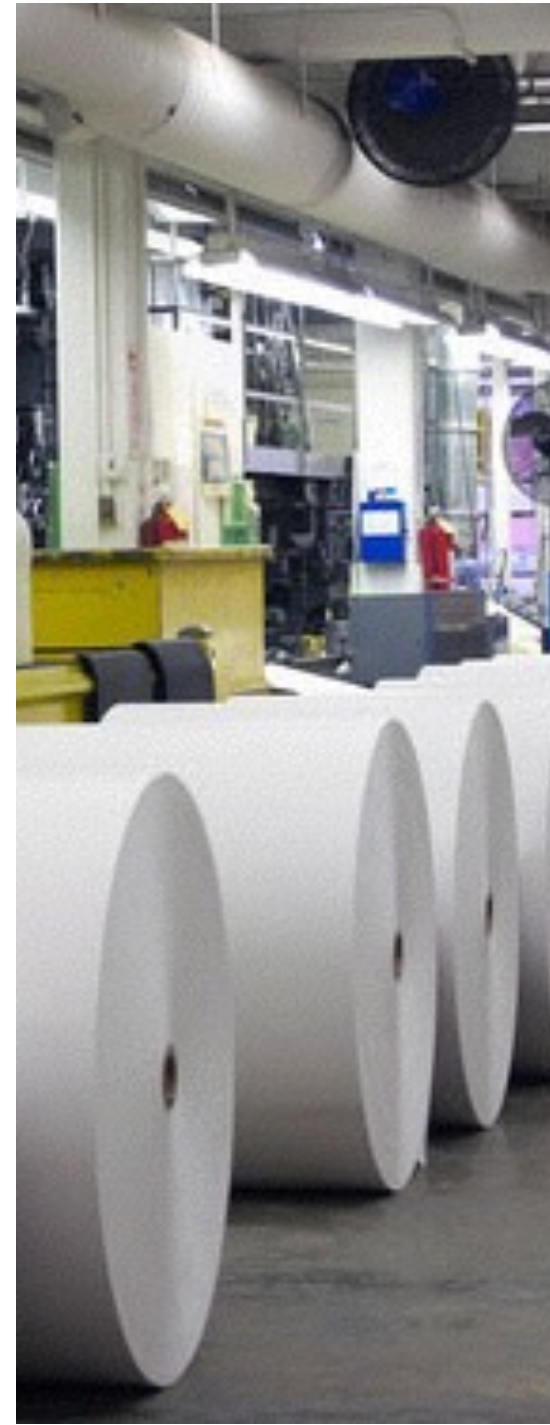
# *Forest in Poland and Europe*



# Functions of forests

*generative* *ecologic* *recreational*

*generative*



Forests are natural factories. They give us wood and other materials. Wood is used in many aspects of our lives. We need it to build houses, bridges or other constructions. It also shouldn't be forgotten that every year millions of cubic meters of wood are used in paper production. What is more, we use wood as fuel because it burns easily. Hard coal is also made of trees which have been growing on the Earth for billions of years.



*generative*



Apart from their industrial functions, forests are also a source of food. Being a habitat for many species of insects and animals, they provide us with meat. Mushrooms and forest fruits can barely be found anywhere else. Moreover, forests are our natural pharmacy. Many herbs used in the production of pharmaceuticals can also be found only there.



"A single mature tree can absorb carbon dioxide at a rate of 48 lbs./year and release enough oxygen back into the atmosphere to support 2 human beings."

- McAliney, Mike. *Arguments for Land Conservation: Documentation and Information Sources for Land Resources Protection*, Trust for Public Land, Sacramento, CA, December, 1993

Forests stabilize the hydrologic cycle, have an impact on the climate. They protect us against floods and avalanches. They prevent the ground from sliding down steep slopes. Their presence protects soil against erosion. However, the most important function of the forests is oxygen production. Without them we wouldn't have anything to breathe with. It is said that one big tree produces enough oxygen for two people. In the process of photosynthesis they absorb carbon dioxide. They also clean the air of pollution.



*recreational*



*Beskids*

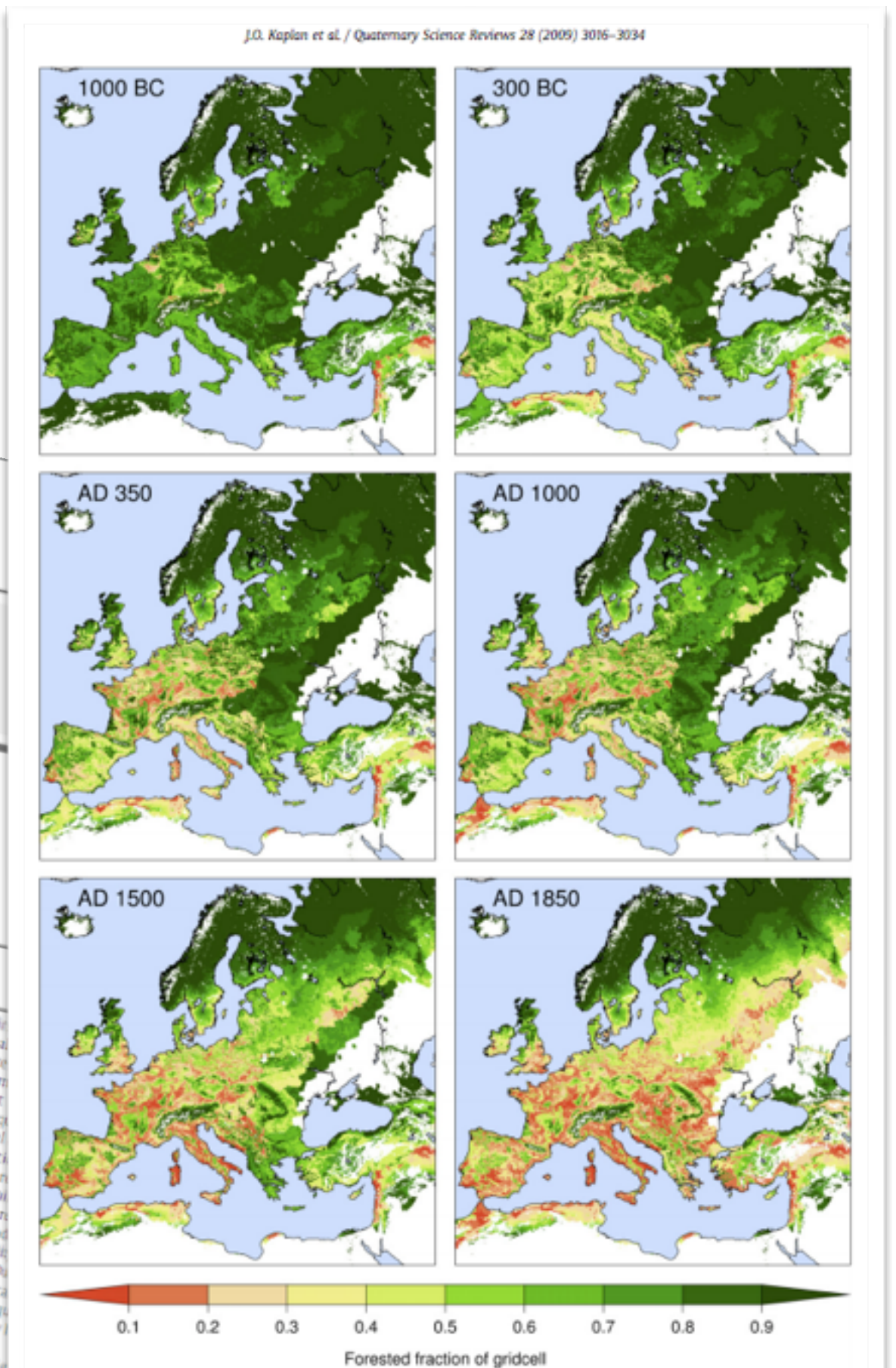
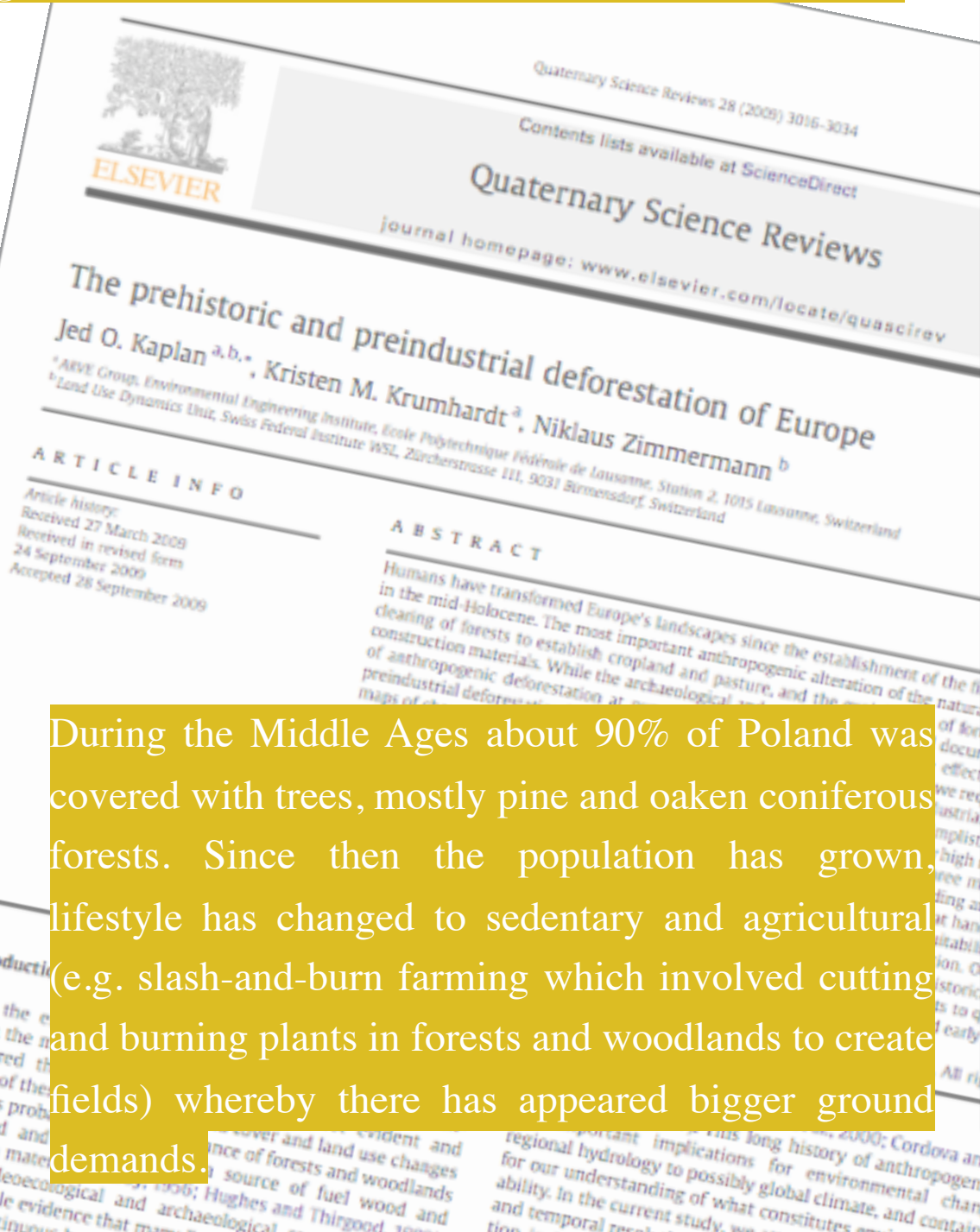


Forests also muffle noise so they are a good place for walk. They enrich the landscapes, possibilities of spending time and job market. The forest nearby give work places for people who want to be for example lumbermen or other professions connected with wood.



# Afforestation rate


erate of sheeting of certain surface  
with forests; it's a ratio of a surface  
overgrown by forests to entire surface



The prehistoric and preindustrial deforestation of Europe  
Jed O. Kaplan a,b,\* , Kristen M. Krumhardt a, Niklaus Zimmermann b



# *deforestation*



In 1800 there was about 40% afforestation rate and due to big agricultural expansion and great wood demand it kept decreasing. Biological diversity has dropped, soil erosion and impoverishment of landscapes has occurred, water balance has been disrupted and as the result in 1920 only 38% of Poland was covered with forests.



An aerial photograph of a vast, dense forest of spruce trees. The trees are tightly packed, creating a textured green surface. In the center of the image, a single tree stands out with a bright yellow canopy, contrasting sharply with the surrounding green. The lighting is even, highlighting the uniformity of the forest.

# *Spruce Forest*

*2010 National Geographic Photography Contest*

And then came World War II which destroyed much more anyone could have imagined. Afforestation rate in 1945 equaled only 20,8%. People tried to help that but only made it worse by seeding pines and spruces on fertile lands where degames should grow. That's how we ended up with hectares of congenerous tree stands which were nonresistant to pests, drought, wind or pollution.



*afforestation*

*Euroenviro 2011*

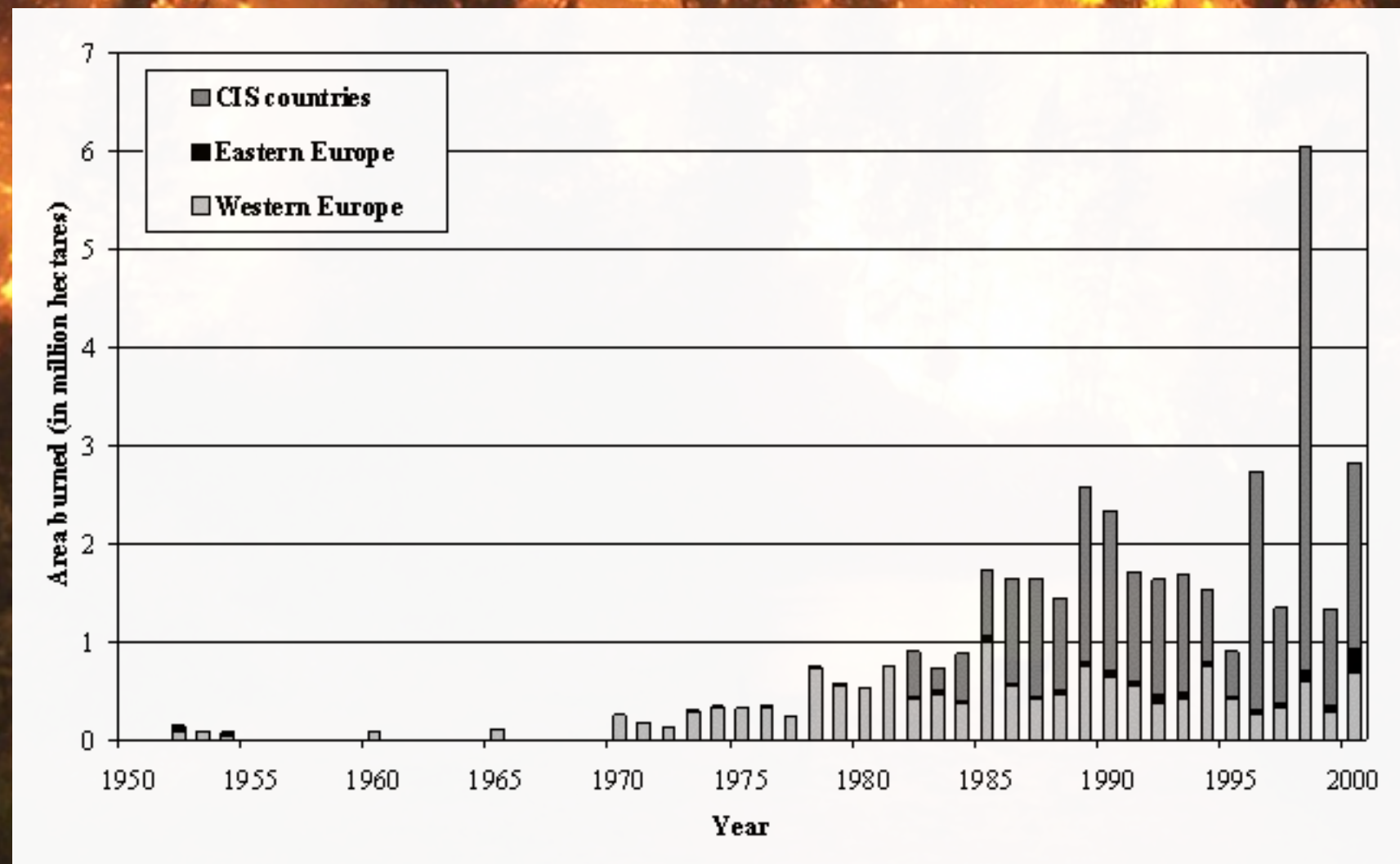
*Lika afforestation, 9 April 2011*



In second half of XX century the ecologic function of forests was finally discovered and fully appreciated. Over time afforestation rate increased so in 1970 it equaled 27%. The biggest growth took place in the 60s when average size of afforestation was around 55 thousands hectares.



# *forest fires*







sources:

bosphorusshipsupply.com

worldwildlife.org/

ewa.wolny.pl/wp-content/uploads/2014/10/Śląsko-Morawskie-Besкиды.jpg

globalcosmeticsnews.com

bostonmagazine.com

publicdomainpictures.net

organiclifestylemagazine.com

nationalgeographic.com

[http://sciaga.pl/tekst/64445-65-funkcje\\_lasu](http://sciaga.pl/tekst/64445-65-funkcje_lasu)

[https://pl.wikipedia.org/wiki/Pozaprodukcyjne\\_funkcje\\_lasu](https://pl.wikipedia.org/wiki/Pozaprodukcyjne_funkcje_lasu)

<http://www.national-geographic.pl/kierunki/nie-bylo-nas-rosly-puszcze>

<http://www.nature.com/nclimate/journal/v3/n1/full/nclimate1635.html>

Katarzyna Bednarska / II Liceum Ogólnokształcące w Krakowie

Natalia Nawrocka / III Społeczne Liceum Ogólnokształcące STO im. Juliusza Słowackiego

Jakub Dudek / III Społeczne Liceum Ogólnokształcące STO im. Juliusza Słowackiego