# VIRGIN   FORESTS   IN   UKRAINE

**Volodymyr Korzhov – First Deputy Director for Science
Ukrainian Research Institute of Mountain Forestry
Ivano-Frankivsk**

VIRGIN FORESTS IN UKRAINE

Owner, administrator	County	Based on		Type of property	Altitudine		Total area (ha)	Quntity of plots	The level of the forests protection (fully protected, in progress, not protected)
		Forest management plan, edition (year)	Study, edition		minimum	maximum			
Carpathian Biosphere Reserve	Zakarpattya		2007	state owned	600	1650	15177,0	24	fully protected
Uzhanskyi National Nature Park	Zakarpattya	2008		state owned	650	1200	942,6	15	fully protected
							16119,6		
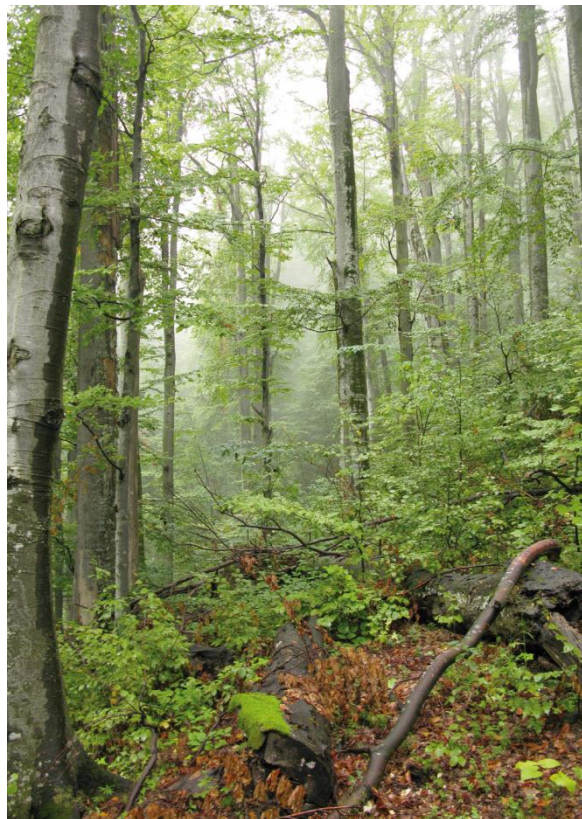
A Swiss-Ukrainian Scientific Adventure
Inventory of the Largest Primeval Beech Forest in Europe

Editors: Brigitte Commarmot, Urs-Beat Brändli, Fedir Hamor, Vasyl Lavnyy

Publisher:
Swiss Federal Institute for Forest, Snow and Landscape Research WSL, Birmensdorf
Ukrainian National Forestry University, L'viv
Carpathian Biosphere Reserve, Rakhiv
2013

VIRGIN FORESTS IN UKRAINE

The location of the beech forests of the Ukrainian-Slovak UNESCO world heritage site

УкрНДІгірліс

БУКОВІ ПРАЛІСИ КАРПАТ
PRIMEVAL BEECH FORESTS OF THE CARPATHIANS

1. Чорногора / Chornohora
2. Гавешова / Havešová
3. Кузій – Трибушани / Kuziy – Trybushany
4. Мараморош / Maramorosh
5. Рожок / Rožok
6. Стужиця – Буковські Врхи / Stužica – Bukovské Vrchy
7. Стужиця – Ужок / Stuzhytsia – Uzhok
8. Свидовець / Svydovets
9. Уголька – Широкий Луг / Uholka – Shyrokyi Luh
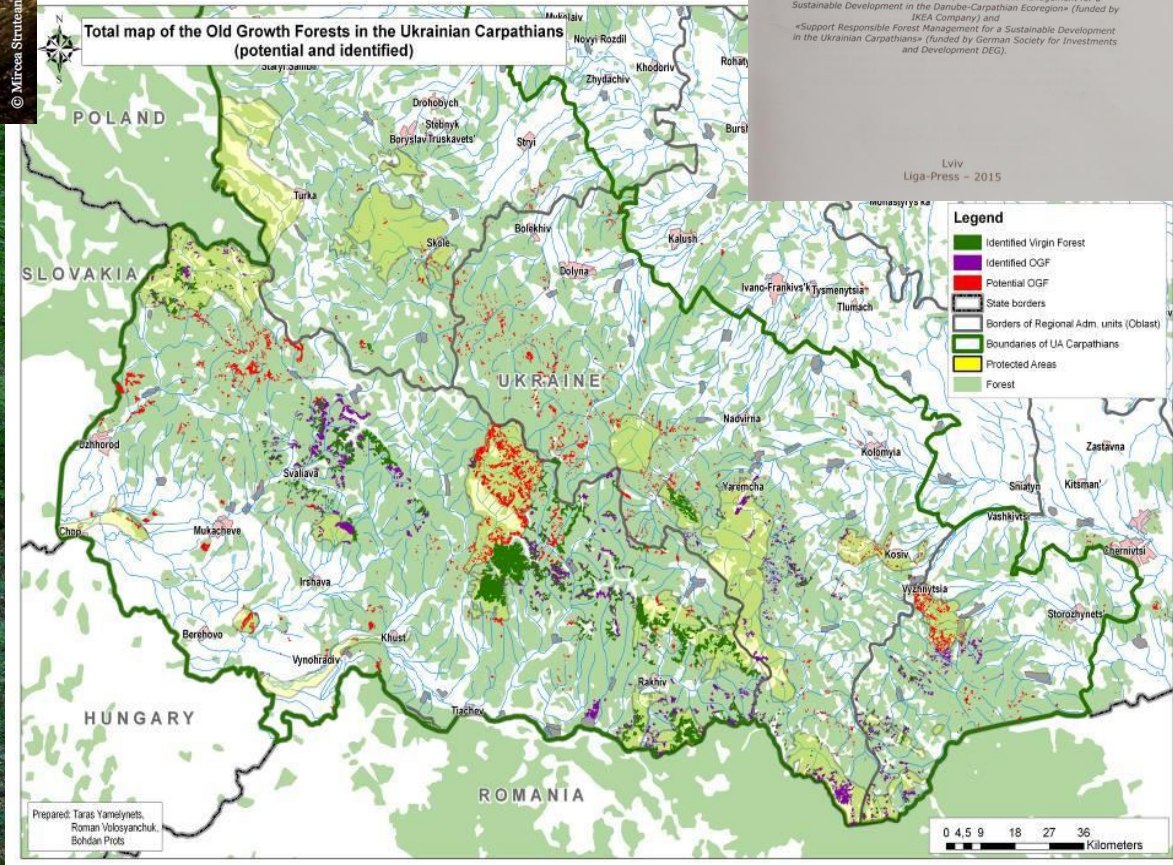10. Вігорлат / Vihorlat

VIRGIN FORESTS IN UKRAINE

УкрНДІгірліс

With the support of the World Wide Fund for Nature (WWF) last years conducted a survey the some part of Carpathian's forests. As a result, at the end of 2016 is announced the availability of 54 thousand hectares of virgin forests.

WORLD WIDE FUND FOR NATURE (WWF)
INSTITUTE OF ECOLOGY OF THE CARPATHIANS
NAS OF UKRAINE
UKRAINIAN RESEARCH INSTITUTE OF MOUNTAIN
FORESTRY NAMED AFTER P.S. PASTERNAK

Criteria and Methodology for Old Growth and Virgin Forests Identification

The brochure preparation was supported by the World Wide Fund for Nature (WWF) within the projects «Support Responsible Forest Management for a Sustainable Development in the Danube-Carpathian Ecoregion» (funded by IKEA Company) and «Support Responsible Forest Management for a Sustainable Development in the Ukrainian Carpathians» (funded by German Society for Investments and Development DEG).

Lviv
Liga-Press – 2015

Total map of the Old Growth Forests in the Ukrainian Carpathians (potential and identified)

Legend
Identified Virgin Forest
Identified OGF
Potential OGF
State borders
Borders of Regional Adm. units (Oblast)
Boundaries of UA Carpathians
Protected Areas
Forest

Prepared: Taras Yamelynets, Roman Volosyanchuk, Bohdan Prots

VIRGIN FORESTS IN UKRAINE

Existing plan to create a special commission to decide on the conformity of these forest sites criteria and indicators established under the Carpathian Convention, and giving official status to virgin forests. Also, it is advisable to pay special attention to the existence of trees with exceptional dimensions according to the site conditions and species.
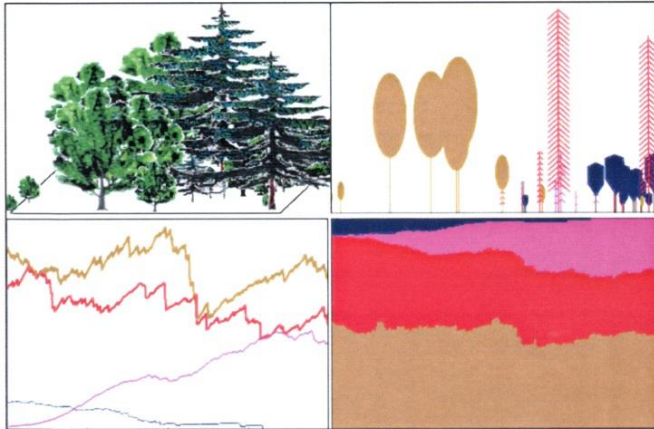

Many virgin forest types were characterized, in part, by enormous old-growth trees that reached sizes rarely seen today. In each photograph, the humans have been highlighted for scale. From left: old-growth yellow poplar in a cove hardwood forest in North Carolina; baldcypress trees in a Florida swamp; virgin white pine-mixed hardwood forest in Virginia.
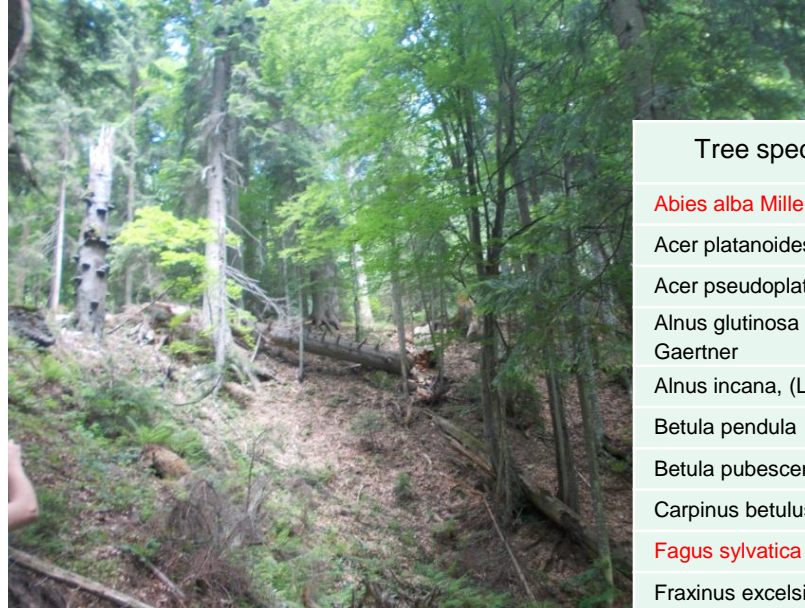
VIRGIN FORESTS IN UKRAINE

УкрНДІгірліс

Created a special Computer model for predicting forest development under different conditions and scenarios, in which used maximal parameters of tree for Carpathian region, determined based on the research of number of scientists.

Ігор Козак, Василь Парпан

Екологічна лісова комп'ютерна модель FORKOME

Kozak I., Parpan V. Forest ecological computer model FORKOME . – Ivano - Frankivsk, Vasyl Stefanyk Precarpatian National University.- 2 006. - 207p.

Changes of trees species composition, their biomass and number of trees on research areas of beech, fir, spruce forests in control and climatic changes conditions were predicted with the use of FORKOME model. Changes of biomass and amount of trees in the process of felling, regeneration of forest at spruce stands are shown. The possibilities of the model's use for prediction of taxation departments, forest massif changes, auto and cross correlation of biomass and amount of trees are presented.

Maximal parameters of tree, which used in FORKOME

Tree species	H max, m	D max, cm	A max, year
Abies alba Miller	60	150	400
Acer platanoides, L	35	100	200
Acer pseudoplatanus, L	40	150	300
Alnus glutinosa , (L.) Gaertner	40	100	200
Alnus incana, (L.) Moench	25	50	100
Betula pendula Roth	35	100	100
Betula pubescens Ehrh	30	100	100
Carpinus betulus L.	35	100	200
Fagus sylvatica L.	45	150	300
Fraxinus excelsior L.	40	150	300
Juniperus communis L.	15	50	400
Larix decidua Miller	50	150	400
Picea abies (L.) Karsten	55	150	400
Pinus cembra L.	25	150	500
Pinus mugo Turra	15	50	200
Pinus sylvestris L.	45	150	400
Populus tremula L.	40	100	100
Quercus petraea (Mat.) LiebL	40	250	500
Quercus robur L.	45	250	500
Taxus baccata L.	25	100	500
Tilia cordata Miller	45	250	500
Ulmus glabra Hudson	40	100	300

VIRGIN FORESTS IN UKRAINE

Conclusions and suggestions

1. When carrying out identification work of virgin forests, it is necessary to ensure objective results that are confirmed by reliable values in accordance with the criteria and indicators approved under the Carpathian Convention.

2. On the sites of the virgin forests, there should be trees whose parameters are no less than available in the presented table (see slide №6).

3. It is advisable to ensure:

 - Organization of the work of the special commission (preferably at the international level) to make official decisions about attributing of area to virgin forests;

- Mandatory allocation of virgin forest areas in forest management documents;

- The establishment of the form and content of the document for virgin forest territory and the mechanisms for its approval.

THANK YOU
FOR ATTENTION!

**Volodymyr Korzhov,
UkrRIMF**