# CURRICULUM VITAE ANDRII BILOUS

#### Affiliation and Official Address:

Doctor of Sciences, Head of Department of Forest Mensuration and Forest Management, Institute of Forestry and Landscape-Park Management, the National University of Life and Environmental Sciences of Ukraine (NUBiP of Ukraine) www.nubip.edu.ua

15 Heroiv Oborony Street Kyiv, Ukraine, 03041 Contact tel. cell: + 380 67 209 75 45 (Signal, Viber, WhatsApp) Tel/fax: + 380 44 527 85 23 E-mail: <u>bilous@nubip.edu.ua</u>, <u>andrii.m.bilous@gmail.com</u> <u>https://www.researchgate.net/profile/Andrii\_Bilous</u> <u>https://orcid.org/0000-0002-7589-4307</u> <u>https://www.scopus.com/authid/detail.uri?authorId=56019506300</u>

# 1. Nationality: Ukrainian

#### 2. Date of birth:

10.05.1983

#### 3. Place of Residence: Ukraine

#### 4. Education

Date	Institution	Degree(s) or diploma(s) obtained
2002	The Lubny Forest College, Ukraine	Junior Specialist degree with honors in
		forestry
2005	The National Agricultural University of	Bachelor's degree with honours in for-
	Ukraine, Faculty of Forestry, Kyiv	estry
2006	The National Agricultural University of	Master's degree with honours in forestry
	Ukraine, Faculty of Forestry, Kyiv	
2010	The National University of Life and Environ-	Candidate of agricultural sciences (equal
	mental Sciences of Ukraine	to Ph.D.) on forest mensuration and for-
		est inventory
2016	The National University of Life and Environ-	Doctor of Sciences in forestry, silviculture,
	mental Sciences of Ukraine	forest mensuration and forest inventory

# 5. Language skills

English - Upper-Intermediate (reading, speaking and writing), German - Elementary (reading, speaking and writing), Ukrainian - Native (reading, speaking and writing).

# 6. Membership in professional bodies:

• The Forestry Academy of Sciences of Ukraine (NGO).

# 7. Other skills:

- data analysis, leadership, teamwork;
- writing reports, organizing seminars and conferences;
- supervising PhD students.

# 8. Present position:

• Doctor of Sciences, head of the Department of Forest Mensuration and Forest Inventory of the Institute of Forestry and Landscape-Park Management, National University of Life and Environmental Sciences of Ukraine.

# 9. Years of professional experience, including in an international environment:

- 27 years in forestry;
- 20 years of learning and forest research experience;
- 15 years of experience as a project leader in research of forest management planning and inventory, forest ecosystem services assessment;
- 15 years of experience managing research at a university;
- Since 2010 actively participated in a number of international projects:



- FP7-PEOPLE-2009-IRSES, Marie Curie Actions – International Research Staff Exchange Scheme (IRSES) – "GESAPU – Geoinformation technologies, spatio-temporal approaches, and full carbon account for improving accuracy of GHG inventories";

- GEF UNEP Project "Conserving, Enhancing and Managing Carbon Stocks and Biodiversity in the Chornobyl Exclusion Zone" (Project ID: 4634; IMIS: GFL/5060-2711-4C40);

- 2 years Ukraine-Austria R&D projects for the period of 2017-2018 «Assessment of carbon cycling of forests based on advanced systems approaches»;
- 3 years Ukraine-Austria R&D projects for the period of 2019-2021 «Disturbances impact on forest ecosystem services of Chornobyl Exclusion Zone»;
- 3 years of experience of articles review for journals "Forests", "Journal of Environmental Management", "Acta Oecologica", "Plant", "Land", "Remote Sensing", "Polish Journal of Ecology".

#### 10. Teaching experience

Course	Duration
Forest management planning	15 years
Forest mensuration	15 years
Forest inventory and monitoring	10 years
Disturbances Impact on Forests	5 years
Forest ecosystem services	5 years

#### 11. Key qualifications:

- Good experience applying mathematical methods and computers in forestry research.
- Great experience in forest inventory research, access to live biomass and dead biomass of forests.
- Great communication and organisational skills, hardworking, diligent.

Date	Location	Company	Position	Description
Sep 2018 - present	Kyiv, Ukraine	The National Univer- sity of Life and Envi- ronmental Sciences of Ukraine	Head of Department of Forest Mensuration and Forest Manage- ment	• Research of forest ecosys- tem services, forest inventory and teaching of forestry courses.
Feb 2022 - Jan 2025	Ukraine	Armed Forces of Ukraine	Head of S3, Captain	• • Planning and manage- ment of defensive and offensive combat operations
Jan 2020 - May 2020	State Col- lege, USA	The Pennsylvania State University	Visiting Research Scholar	<ul> <li>Improved existing and cre- ated new research methods of forests and teaching of forestry.</li> </ul>
Mar 2010 - Nov 2014	Kyiv, Ukraine	The National Univer- sity of Life and Envi- ronmental Sciences of Ukraine	Head of Scientific and Research Department	• Managed to organize scien- tific and research projects in ag- riculture and forestry.
Apr 2013 - Sep 2013	Kyiv, Ukraine	Scientific Park of the National University of Life and Environmen- tal Sciences of Ukraine "Sustainable Natural resource management and Quality of Life"	Director	• The scientific park has been created. Research and innova- tion work is organized. The main processes were managed.

#### 12. Long-term professional experience (employment)

Date	Location	Company	Position	Description
Total more than 6 months (2013, 2014, 2017, 2018, 2019)	Laxen- burg, Austria	The International In- stitute for Applied Systems Analysis	Visiting Research Scholar	• A study of the carbon cycle in forest ecosystems has been performed. The impact of forest ecosystem disturbances on car- bon emissions and the productiv- ity of ecosystem services was as- sessed. Forest inventory meth- ods have been improved.
Jan 2007 - Feb 2009	Kyiv, Ukraine	The National Univer- sity of Life and Envi- ronmental Sciences of Ukraine	Assistant Professor of Forestry	• Research and teaching of forestry courses. Seminars, con- ferences and training courses were organized. Foresters of state forestry enterprises were consulted.
Dec 2006 - Feb 2007	Horodnia, Ukraine	The Horodnianske forestry	Timber Sales Manager	• Delivered timber to cus- tomer locations within specific timeframes.
Apr 2002 - Aug 2002	Horodnia, Ukraine	The Horodnianske forestry	Forest Master, Timber Sales Manager	<ul> <li>Inventoried trees, assessed diversity and monitored health.</li> <li>Supported stand improvement, thinning and economic projects by marking timber.</li> </ul>

# 13. Relevant short-term assignments

Date	Location	Client	Position	Description
2004	England	GS Shropshire & Sons	Student, worker	Learning of English agriculture.
11/2008	Russia	Russian State Agrarian University - Moscow Timiryazev Agricultural Academy	Volunteer	Sharing of Ukrainian experience of activity student government.
10/2006	Poland	University of Technol- ogy and Life Sciences. Jan and Jędrzej Śni- adeckich in Bydgoszcz	Volunteer	Study of activity student government in Po- land and Ukraine.
10/2010	Belarus	Forest Institute of the National Academy of Sciences of Belarus	Visiting re- search scholar	Participation in scientific conference. Sharing of Ukrainian-Belorussian experience of forest ecosystem science.
11/2010	Germany	Humboldt University of Berlin	Visiting re- search scholar	Project for the development of cooperation between young scientists
11/2010	Germany	Leibniz Institute for Ag- ricultural Engineering Potsdam-Bornim	Visiting re- search scholar	Project for the development of cooperation between young scientists
8/2013 2/2014 5/2014	Austria	The International Insti- tute for Applied Sys- tems Analysis	Visiting re- search scholar	Participant of FP7-PEOPLE-2009-IRSES, Marie Curie Actions – International Research Staff Exchange Scheme (IRSES) – "GESAPU – Geoinformation technologies, spatio-tem- poral approaches, and full carbon account for im-proving accuracy of GHG inventories.
10/2017 11/2018	Austria	The International Insti- tute for Applied Sys- tems Analysis	Visiting re- search scholar	Ukraine-Austria R&D projects for the period of 2017-2018 «Assessment of carbon cycling of forests based on advanced systems ap- proaches».

Date	Location	Client	Position	Description
11/2019	Austria	The International Insti- tute for Applied Sys- tems Analysis	Visiting re- search scholar	Ukraine-Austria R&D projects for the period of 2019-2020 «Disturbances impact on for- est ecosystem services of Chornobyl Exclu- sion Zone».
01- 05/2020	USA	The Pennsylvania State University	Visiting re- search scholar	Participation in The Woskob International Research in Agriculture Research in Forestry Teaching of lectures
10- 11/2021	Austria	The International Insti- tute for Applied Sys- tems Analysis	Visiting re- search scholar	Ukraine-Austria R&D projects for the period of 2021-2022 « Impact of Wildfires on the Carbon Cycle of Forest Ecosystems».
01/2022	Poland	The Warsaw University of Life Sciences	Visiting professor	Teaching of course "Disturbances Impact on Forests"
02/2022	Germany	The Weihenstephan- Triesdorf University of Applied Sciences	Visiting professor	International exchanging in forestry
11/2023	Austria	The International Insti- tute for Applied Sys- tems Analysis	Visiting re- search scholar	Forum "Forest Education and Science"
11/2024	Germany	The Weihenstephan- Triesdorf University of Applied Sciences	Visiting professor	Erasmus+
03/2025	Germany	The Weihenstephan- Triesdorf University of Applied Sciences	Visiting professor	International exchanging in forestry

#### 14. Selected Publications:

1. **Bilous, A.,** Zadorozhniuk, R., Makarevych, A., Svynchuk, V., Lashko, A., Bilous, M., Myroniuk, V., & Matsala, M. (2024). Sampling Protocol for Measuring Mean Diameter at Breast Height of Forked Urban Trees. Forests, 15(3), 458. <u>https://doi.org/10.3390/f15030458</u>.

2. Matsala, M., Odruzhenko, A., Hinchuk, T. ... **Bilous, A.** ...et al. War drives forest fire risks and highlights the need for more ecologically-sound forest management in post-war Ukraine. Sci Rep 14, 4131 (2024). https://doi.org/10.1038/s41598-024-54811-5

3. **Bilous, A.**, Myroniuk, V., Holiaka, D., Bilous, S., See, L., & Schepaschenko, D. (2017). Mapping growing stock volume and forest live biomass: A case study of the Polissya region of Ukraine. Environmental Research Letters, 12(10) doi:10.1088/1748-9326/aa8352. **IF 6.793** 

4. **Bilous, A.**, Holiaka, D., Matsala, M., Kashparov, V., Schepaschenko, D., Lakyda, P., . . . Otreshko, L. (2020). 90sr content in the stemwood of forests within ukrainian polissya. Forests, 11(3) oi:10.3390/f11030270. **IF 2.633** 

5. Matsala, M., **Bilous, A.**, Myroniuk, V., Diachuk, P., Burianchuk, M., & Zadorozhniuk, R. (2021). Natural forest regeneration in chernobyl exclusion zone: Predictive mapping and model diagnostics. Scandinavian Journal of Forest Research, 36(2-3), 164-176. doi:10.1080/02827581.2021.1890816. **IF 2.103** 

6. Lakyda, P., Shvidenko, A., Bilous, A., Myroniuk, V., Matsala, M., Zibtsev, S., . . . Kraxner, F. (2019). Impact of disturbances on the carbon cycle of forest ecosystems in Ukrainian Polissya. Forests, 10(4) doi:10.3390/f10040337. IF 2.103

7. Myroniuk, V., **Bilous, A.**, Khan, Y., Terentiev, A., Kravets, P., Kovalevskyi, S., & See, L. (2020). Tracking rates of forest disturbance and associated carbon loss in areas of illegal amber mining in ukraine using landsat time series. Remote Sensing, 12(14) doi:10.3390/rs12142235. **IF 4.848** 

8. Myroniuk, V., Kutia, M., Sarkissian, A. J., **Bilous, A.**, & Liu, S. (2020). Regional-scale forest mapping over fragmented landscapes using global forest products and landsat time series classification. Remote Sensing, 12(1) doi:10.3390/RS12010187. IF **4.848** 

9. Matsala, M., Bilous, A., Myroniuk, V., Holiaka, D., Schepaschenko, D., See, L., & Kraxner, F. (2021). The return of nature to the chernobyl exclusion zone: Increases in forest cover of 1.5 times since the 1986 disaster. Forests, 12(8) doi:10.3390/f12081024. **IF 2.633** 

10. Schepaschenko, D., Chave, J., Phillips, O. L., Lewis, S. L., Davies, S. J., Réjou-Méchain, M., **Bilous, A.**, . . Zo-Bi, I. C. (2019). The forest observation system, building a global reference dataset for remote sensing of forest biomass. Scientific Data, 6(1) doi:10.1038/s41597-019-0196-1. **IF 7.620** 

#### 15. Awards

#### For achievements in scientific activity:

2024 Woskob Distinguished Service Award (2024). Grade of the Verkhovna Rada of Ukraine "For Services to the Ukrainian People" (2020). Laureate of the Prize of the President of Ukraine for Young Scientists in 2015.

#### For active public activity:

Grade of Honor of the Ministry of Education and Science (2009); Grade of Honor of the Ministry of Agrarian Policy of Ukraine (2007-2008); Grade of Honor of the Ministry of Family, Youth and Sports (2009).

#### For the defense of Ukraine:

Silver Cross (2023). Distinction of the Ministry of Defense "Firearms" (2023). Breastplate "Badge of Honor" (2023). Medal "Honor. Glory. State" (2023). Breastplate "Participant in hostilities" (2023). Iron Cross (2024). Cross of the Ground Forces (2024). Award of the President of Ukraine "For the Defense of Ukraine" (2024). Award of the Minister of Defense of Ukraine "Defender of Ukraine" (2024). Award of the 23rd Separate Special Forces Battalion (2024).

#### 16. Volunteering

Blood donor. Member of forestry and environmental NGOs.