The Drava wetland forests

OŠ Ivana Kukuljevića, Belišće

Belišće-a city on the Drava

- On the right bank of the Drava River
- Part of the Pridrav lowland
- Drava - the border with Baranja
- Hydrological GLOBE station

GOAL OF THE WORK

- Land cover research
- Wetland forest
- "walking forests"
- white willow forest
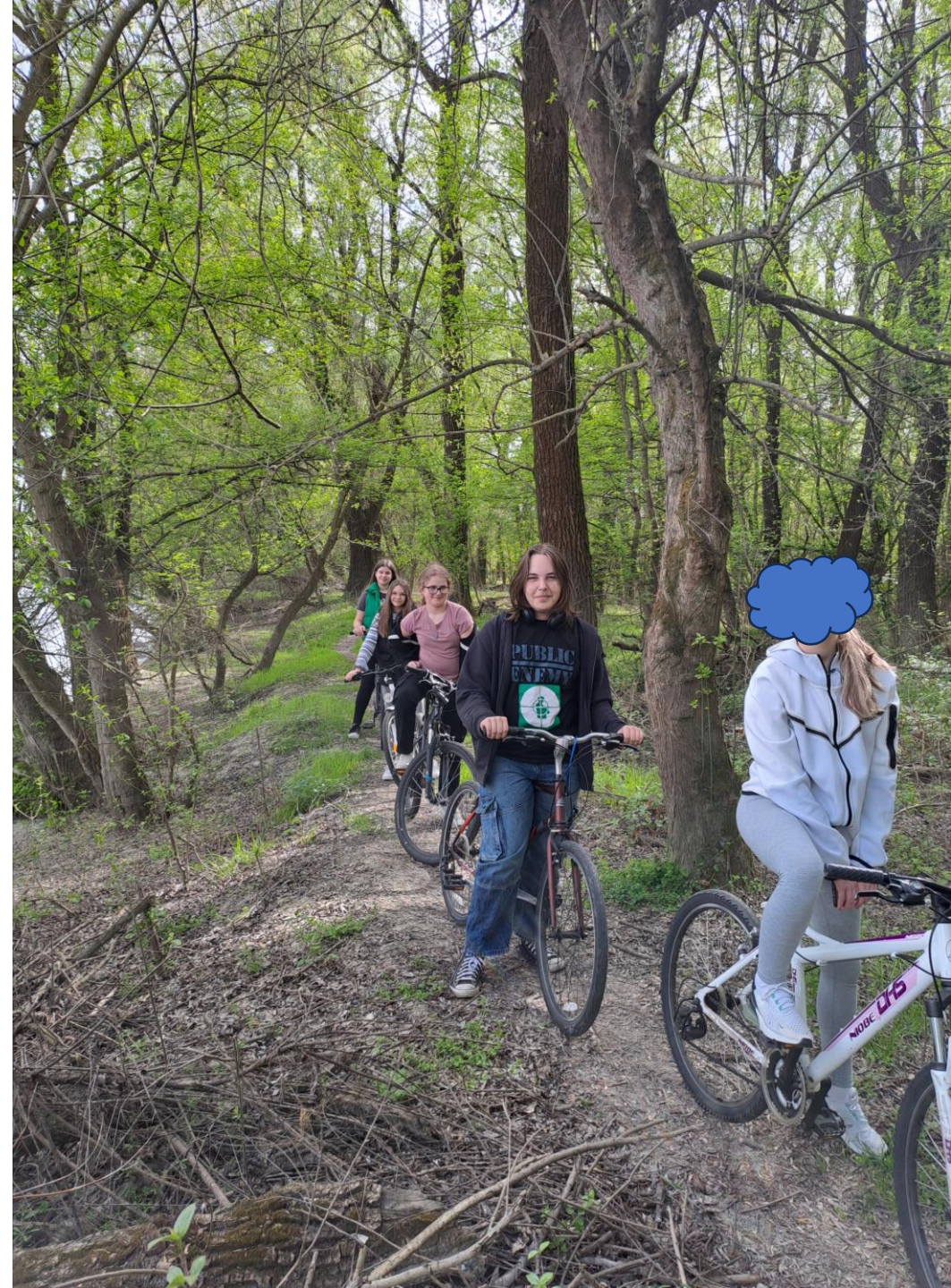- black and white poplar forest
- endangerment of these areas

The importance of wetlands, wetlands and floodplain forests

❖ They control floods.

❖ They retain and deposit sediments.

❖ They neutralize various toxins.

❖ Sponges that, depending on the amount of groundwater and surface water, release or retain water.

❖ Natural water purifiers, as they collect polluted water from surrounding areas for marsh plants, such as reeds, to process and purify (removing phosphates and nitrogen compounds, which are the basic components of artificial fertilizers in agriculture).

❖ They are centers of biodiversity for plants and animals and are often compared to tropical rainforests.

❖ They mitigate the effects of floods and droughts.

❖ They prevent coastal erosion.

❖ They are habitats for a large number of species of birds, mammals, reptiles, amphibians, fish, and invertebrates.

❖ They are increasingly being used for tourism, specifically ecotourism.

RESEARCH QUESTION AND HYPOTHESIS

- **RESEARCH QUESTION**

- Are the GLOBE protocols for biometrics precise enough to determine the existence of characteristic wetland forests?

- **HYPOTHESIS**

- By applying the GLOBE protocols for biometrics, it is possible to determine the existence of characteristic wetland forests.
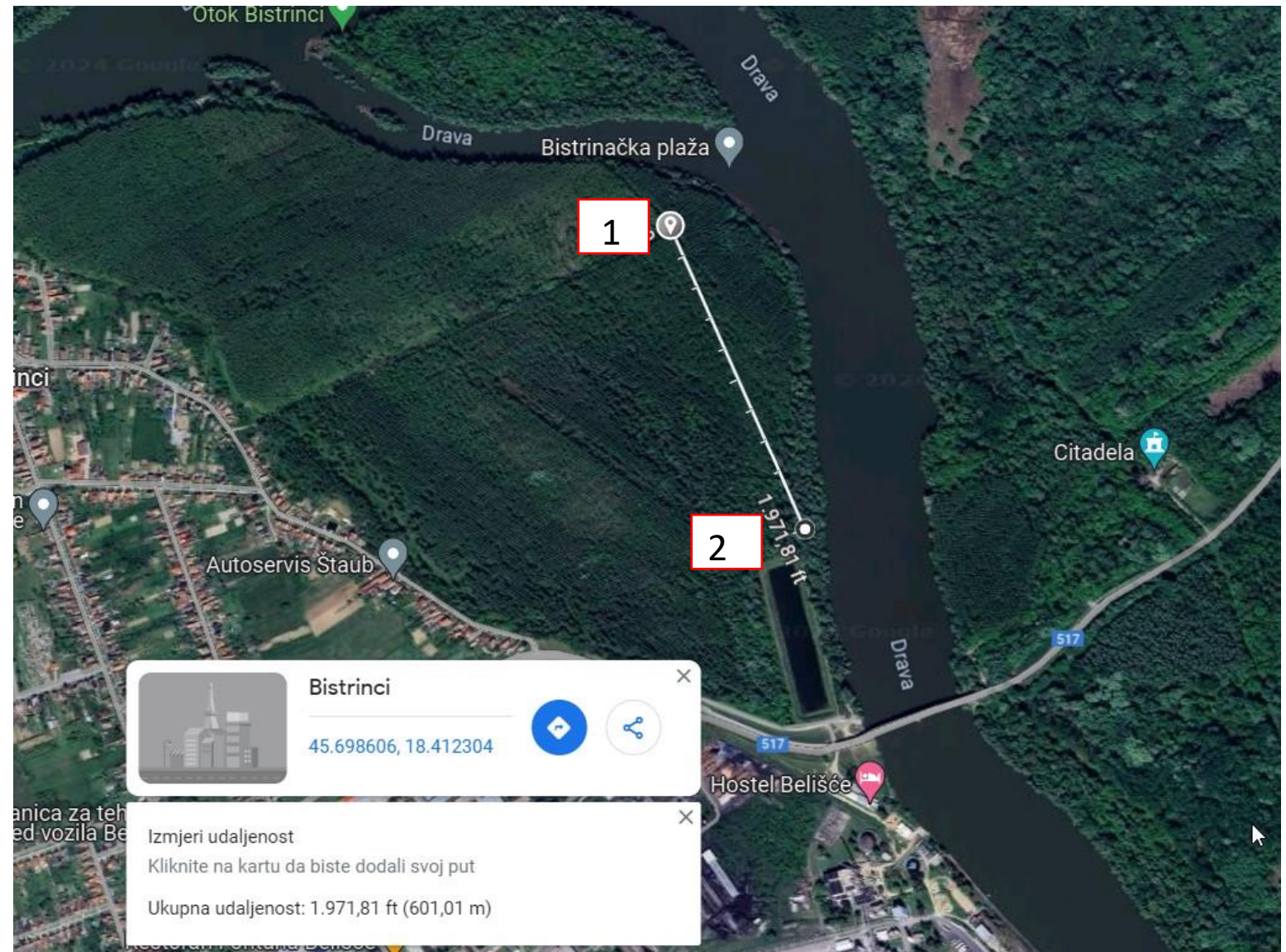
Research Methods

❖GLOBE protocol for biometrics

❖Two research plots

❖PlantNet application

❖Key for species identification
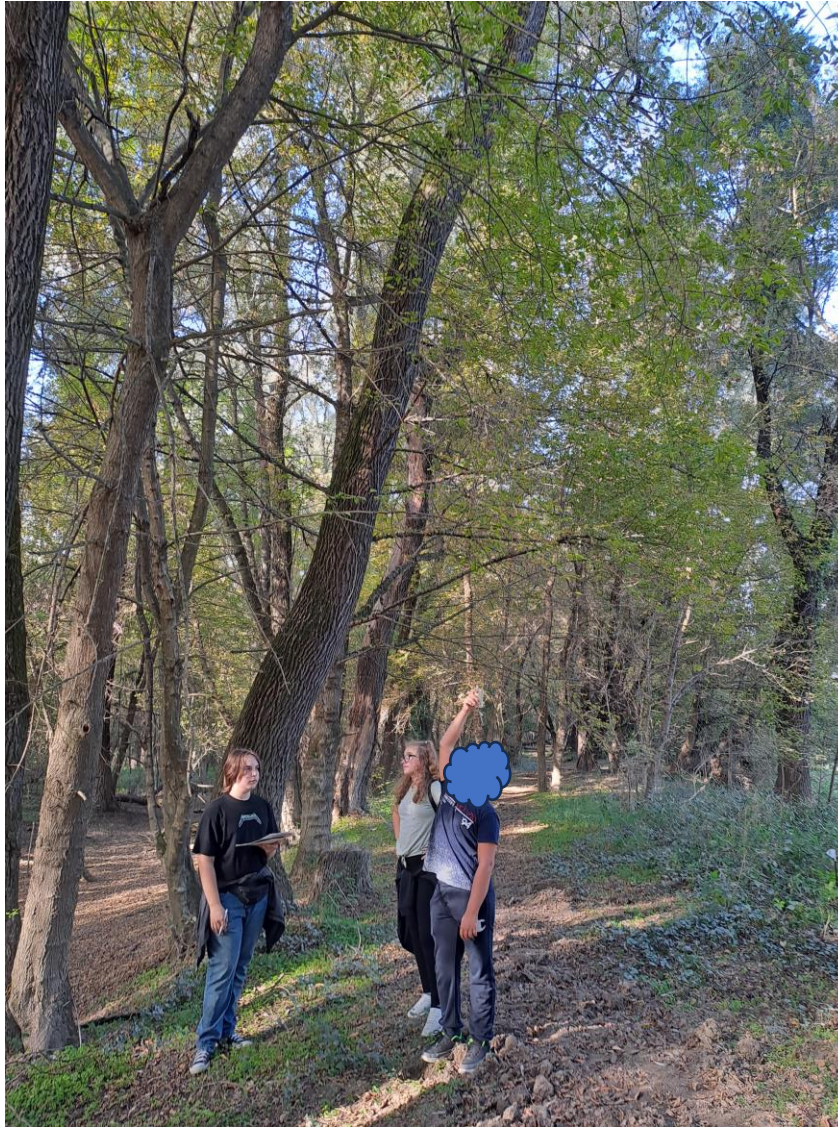
1-Bistrinci Beach   2 - Vrbik

Poplar Forest - Bistrinci Beach

White Willow Forest - Vrbik

We determined:

- MUC category

- Canopy and ground cover
- Dominant and co-dominant species
- Tree height and circumference
- Plant species

Presentation and Data Analysis

Data for Plot 1 - Bistrinci Beach

MUC KOD- 1231, Deciduous forest without evergreen trees

School: OS Ivana Kukuljevica
Site: DRŠ- bistrinačka plaža

Measurements | Data Counts | Scho

Biosphere

Land Cover

Data Date Range: 2023-12-31 to 2023-12-31

Measurement: 1

Land Cover Id: 63049
Data Source: GLOBE Data Entry Site
Definition
Measured At: 2023-12-31 16:55:41.51313
MUC Code: 1231
MUC Description: Woodland, Mainly
Deciduous, Cold-Deciduous without
Evergreen Trees, Broad-Leaved
Mv Updated At: 2023-12-31
17:00:04.659629+00
Elevation: 89.30 m

Dominantna vrsta drveća Populus × canadensis Moench.	Visina stabla (m)	Opseg stabla (cm)
1. stablo	41,5	100
2. stablo	40,3	95
3. stablo	39,5	91
4. stablo	38,7	87
5. stablo	33,9	87

Shrub Layer - Amorpha (false indigo), dogwood, and hawthorn

Ground Cover - Grasses (GD) and broad-leaved herbaceous plants (FB)

Presentation and Data Analysis

MUC KOD- 1231, Deciduous forest without evergreen trees

- **Data for Plot 2 - Vrbik near the artificial lake**

Shrub Layer - Blueberry bramble (Rubus), wild vine

Ground Cover - Broad-leaved herbaceous plants (FB) and dwarf shrubs (DS); the rest consists of grasses and other green vegetation

Dominantna vrsta drveća Salix alba L.	Visina stabla (m)	Opseg stabla (cm)
1. stablo	37,2	188
2. stablo	36,0	221
3. stablo	34,8	179
4. stablo	31,5	203
5. stablo	27,6	183
Kodominantna vrsta drveća Acer negundo L.	Visina stabla (m)	Opseg stabla (cm)
1. stablo	28,5	180
2. stablo	25,8	104

Conclusions and Discussion

- We confirmed the hypothesis – using the GLOBE protocols, we can accurately determine the existence of floodplain forests (canopy cover and identification of dominant tree species).

- We classified forest communities at a more detailed level compared to the MUC classification, which only recognizes deciduous forests without evergreen elements.

- We highlighted the importance of preserving these natural habitats – through a presentation to the local community and an educational brochure.

THANK YOU FOR YOUR ATTENTION! 😊✨

Media Release Form

NASA Media Release Form for Parent or Guardian of Minor
(continued)

Name of Minor (First and Last): KATJA ZLOJIC
Name of Parent / Legal Guardian / Legal Representative of Minor (First and Last): TIHANA LOVRENČIĆ
Signature of Parent / Legal Guardian / Legal Representative of Minor:
By signing your name below, you agree that you have read the foregoing and fully understand its contents.
Tihana Lovrenčić
Relationship to Minor: kći
Today's Date: 04.03.2025
Contact information for Parent / Legal Guardian / Legal Representative of Minor:
Address: PARK A. HOFMANNA 2c, 31551 BELIŠĆE
Telephone: 099 67 25 981
Email Address: Hlovrencic02@gmail.com
2 of 2

NASA Media Release Form for Parent or Guardian of Minor
(continued)

Name of Minor (First and Last): DOROTEA SUSIC
Name of Parent / Legal Guardian / Legal Representative of Minor (First and Last): TIHOMIR SUSIC
Signature of Parent / Legal Guardian / Legal Representative of Minor:
By signing your name below, you agree that you have read the foregoing and fully understand its contents.
Relationship to Minor: FATHER
Today's Date: 04.03.2025
Contact information for Parent / Legal Guardian / Legal Representative of Minor:
Address: PETRA ZRINSKOG 79, 31551 BELIŠĆE
Telephone: +385 098 9450851
Email Address: tihomir-susic@gmail.com
2 of 2

NASA Media Release Form for Parent or Guardian of Minor
(continued)

Name of Minor (First and Last): EVA VINKOVIC
Name of Parent / Legal Guardian / Legal Representative of Minor (First and Last): JELENA VINKOVIC
Signature of Parent / Legal Guardian / Legal Representative of Minor:
By signing your name below, you agree that you have read the foregoing and fully understand its contents.
Relationship to Minor: MAJKA
Today's Date: 4.3.2025
Contact information for Parent / Legal Guardian / Legal Representative of Minor:
Address: STROSSMAYERA 40, BELIŠĆE
Telephone: 095307 35 44
Email Address: jelica.vinkovic@gmail.com

NASA Media Release Form for Parent or Guardian of Minor
(continued)

Name of Minor (First and Last): VID SOVAGOVIC
Name of Parent / Legal Guardian / Legal Representative of Minor (First and Last): SENKA SOVAGOVIC
Signature of Parent / Legal Guardian / Legal Representative of Minor:
By signing your name below, you agree that you have read the foregoing and fully understand its contents.
Relationship to Minor: majka-čin
Today's Date: 04.03.2025
Contact information for Parent / Legal Guardian / Legal Representative of Minor:
Address: PETRA ZRINSKOG 112, BELIŠĆE
Telephone: 091 786 0468
Email Address: ssovagov@gmail.com

NASA Media Release Form for Parent or Guardian of Minor
(continued)

Name of Minor (First and Last): ANA PREBEG
Name of Parent / Legal Guardian / Legal Representative of Minor (First and Last): IVANA PREBEG
Signature of Parent / Legal Guardian / Legal Representative of Minor:
By signing your name below, you agree that you have read the foregoing and fully understand its contents.
Relationship to Minor: MAJKA
Today's Date: 04.03.2025
Contact information for Parent / Legal Guardian / Legal Representative of Minor:
Address: BISTRINCI, LJUDEVITA GAJA 29, 31551 BELIŠĆE
Telephone: 091/932-4582
Email Address:
2 of 2