

2nd Willy Cup

11.-16.05.2025

Student competition of the Norwegian-German Willy-Brandt Foundation for the promotion of innovative concepts for sustainability, nature and environmental protection

From the 11-16th of May 2025, the second Willy Cup will be organized by the Norwegian-German Willy-Brandt Foundation in cooperation with the Gymnasium Carolinum Neustrelitz. 18 students from Norway, Italy and Germany will participate in a competition, assigned to find answers to natural scientific questions and solve practical tasks related to the sequestration of CO₂ on different forest types belonging to the Gymnasium Carolinum's school forest. The competition is supported by the Schulverein Carolinum e.V. and the Stiftung Wälder für Morgen (Foundation Forests for Tomorrow).

- Sunday: Arrival in the School Camp Babke
- Monday: Welcome and introduction
Distribution of tasks and first excursion
- Tuesday: Individual work on the tasks
Opportunity for second excursion (if required for tasks)
Camp fire and night walk
- Wednesday: Analyses of the data
Activity outside
- Thursday: Preparation of the presentation, final rehearsal
City tour and camp fire
- Friday: 10 minute presentation of results, award ceremony and handover of certificates

18 Participants are split into 3 groups

Each group consists of 2 Norwegian, 2 Italian and 2 German students
(one girl and one boy each)

Group 1

CO₂ sequestration and climate change mitigation using conventional measurement tools

Scientific task:
Estimation of CO₂ sequestration collecting data with conventional tools of measurement

Methods:
Measurement of tree diameters and heights, calculation of biomass, sequestered CO₂ and stored carbon using data from all measured trees

Group 2

CO₂ sequestration and climate change mitigation using conventional measurement tools and regression analyses

Scientific task:
Estimation of CO₂ sequestration collecting data with conventional tools of measurement and using regression analyses

Methods:
Measurement of tree diameters and heights, calculation of biomass, sequestered CO₂ and stored carbon using data from some measured trees and regression analyses

Group 3

CO₂ sequestration and climate change mitigation using laser scanning technology

Scientific task:
Estimation of CO₂ sequestration using data from laser scans

Methods:
Measurement of tree diameters and heights, calculation of biomass, sequestered CO₂ and stored carbon using laser scans

Background of the Project Schoolforest Carolinum:

Initiated in 2021, the project Schoolforest Carolinum allows students from grades 7-12 to take over the stewardship for 2,500 hectares of forests, open lands and a lake, belonging to the German National Natural Heritage. In close cooperation with the local nature conservation organisation (Foundation Forest for Tomorrow), they are actively integrated in the sustainable management and research projects conducted on the sites. The activities aim to increase the student's awareness about ecosystem degradation and climate change and give them a concrete opportunity to become an active part of the sustainability solutions we need for the future. As gained knowledge and experiences are passed on to the next school generation and are presented to partner schools abroad, students act as youth ambassadors, promoting a sustainable use of nature in their respective region. The role of sustainable forest and nature management is also discussed in the context of the necessary sustainability transformation, circular economy and bioeconomy, conveying a holistic understanding of the ecological, economic and socio-political aspects and the multifaceted importance of ecosystems in times of climate change. The students are encouraged to critically discuss visions of a sustainable society and to learn about sustainable use and distribution of natural resources using the example of their own school forest.

