Report on the study visit in order to inspect historical positions of Groenlandia densa on western and central Pomerania

Between 21 to 22 September 2015, within the framework of LIFE13 NAT/PL/000009 project Active protection of water-crowfoots habitats and restoration of wildlife corridor in the River Drawa basin in Poland, a study visit took place covering selected part of the north of Poland. Its aim was to verify literature positions of Groenlandia densa. The inspection covered selected parts of the rivers: Czernica (Miłocice, Słosinko, Przeradz, Grabowo, Pieniężnica), Biała (Bielica), Brda (Rytel). Moreover small water reservoirs between Brzeźnica Krajeńska and Sypniewo were explored, small anthropogenic basin in Młocice, natural drainage mid-forest reservoir west of Słosinko.

The vision was attended by:
Prof. post PhD Waldemar Żukowski – external expert, retired professor in the Department of Plant Taxonomy Adam Mickiewicz University in Poznań
PhD Eng. Sylwia Jurzyk-Nordlöw - Deputy Regional Director for Environmental Protection in Szczecin, Regional Conservator of Nature in Szczecin
PhD Wojciech Puchalski - scientific consultant of the LIFEDrawaPL project
MSc Eng Elżbieta Hołubczat – LIFEDrawaPL project coordinator
PhD Eng. Piotr Waloch - expert on the supervision and control of project activities

Description of individual observation points:

1. Source section of the River Czernica west of Miłocice – stream with very little flow flowing within seepage spring area marshy meadows and broadleaved forests. No aquatic vegetation was found.
2. Czernica between Młocice and Słosinko – mid-field and mid-meadow highly regulated segment, poorlu flowing or standing (clear anaerobic conditions) in a deep trapezoidal river bed, strongly overgrown with rushes. Beaver dams present which pile the river up. Aquatic plants species found in this section are mainly: Elodea canadensis, Lemna minor, Spirodela polyrhiza, Hydrocharis morsus-ranae, Utricularia vulgaris.

3. Czernica south of Słosinko (in the area of active and disused railway line) – dry river bed with partly gravelly bottom (in the agricultural-forest landscape). Visible signs of water flow a few months earlier. No aquatic vegetation.
4. Czernica in the area of Przyradz – mid-field section of strongly expanding sedge rushes, a little water flow visible. Almost complete lack of aquatic vegetation.
5. Czernica in the area of Grabowo – dried section of gravelly bottom in a small alder marshy meadow. No aquatic vegetation observed.
6. Czernica south of Pieniężnica – part of the river strongly overgrowing with rush vegetation, considerable presence of Myosotis scorpioides and Elodea canadensis in the river bed.
7. The River Biała in Bielca – gravelly bottom part of the river with a width of several meters, well-developed aquatic vegetation with dominance of pondweeds: Potamogeton perfoliatus, Potamogeton crispus, Potamogeton alpinus.
8. The River Brda near the bridge in Rytel - part of the river with a width of approximately 20 meters and sandy bottom. A well-developed aquatic vegetation with dominance of Stuckenia filiformis and Potamogeton perfoliatus. Moreover Elodea canadensis and Fontinalis antipyretica. In the Grand Canal of Brda at this altitude underwater form of Sagittaria sagittifolia dominated.
9. The River Brda in the area of a campsite below Rytel – the nature of the river as above, dominance of Potamogeton perfoliatus and Stuckenia filiformis. On the edge of the slope numerous seepage spring areas forming small streams flowing into the Brda. The water in these streams is cold and considerably transparent. In the water of these small streams Veronica beccabunga dominates, while on the banks seepage spring area rushes with Carex acutiformis and Calliergonella cuspidata.
10. Unraveled river bed of the Brda below Rytel – clear seepage spring area character of the banks, aquatic vegetation as in the Brda above.
11. Anthropogenic reservoir in Miłocice - reservoir with a sandy bottom, probably dug. Dominance of Elodea canadensis, moreover Ceratophyllum submersum.
12. Natural mid-forest water reservoir west of Słosinko – the reservoir surrounded by swamp vegetation in the type of transitional peat bog partly changing into forest communities and Vaccinio uliginosi-Betuletum pubescentis. The reservoir clearly eutrophicates itself. Among the aquatic vegetation Utricularia vulgaris and Potamogeton natans were fund.

13. Shallow reservoir between Brzeźnica Krajeńska and Sypniewo – shallow, probably poor trophic mid-forest, gradually terrestrializing natural reservoir of sandy bottom. Surrounded by wide rushes of Carex lasiocarpa with a minor contribution of peat mosses. In the zone of shallow littoral only the presence of Potamogeton natans was noticed.
14. Two mid-field ponds south-east of Sypniewo - almost complete disappearance of these ecosystems as a result of dehydration. Dominance of willow thickets and rushes.

During the inspection the occurrence of Groenlandia densa was not observed. It is concluded that among all inspected positions the most promising place of its current existence is the river Brda below Rytel (especially the supplying seepage spring areas).

Schedule:
21.09.2015 - Czernica and surroundings
22.09.2015 - – the Brda in the area of Rytel, the area of Sypniewo