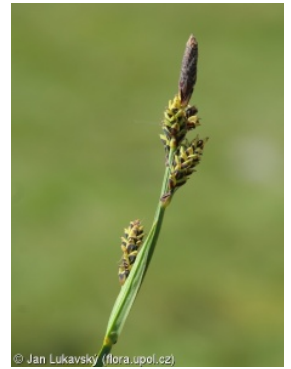
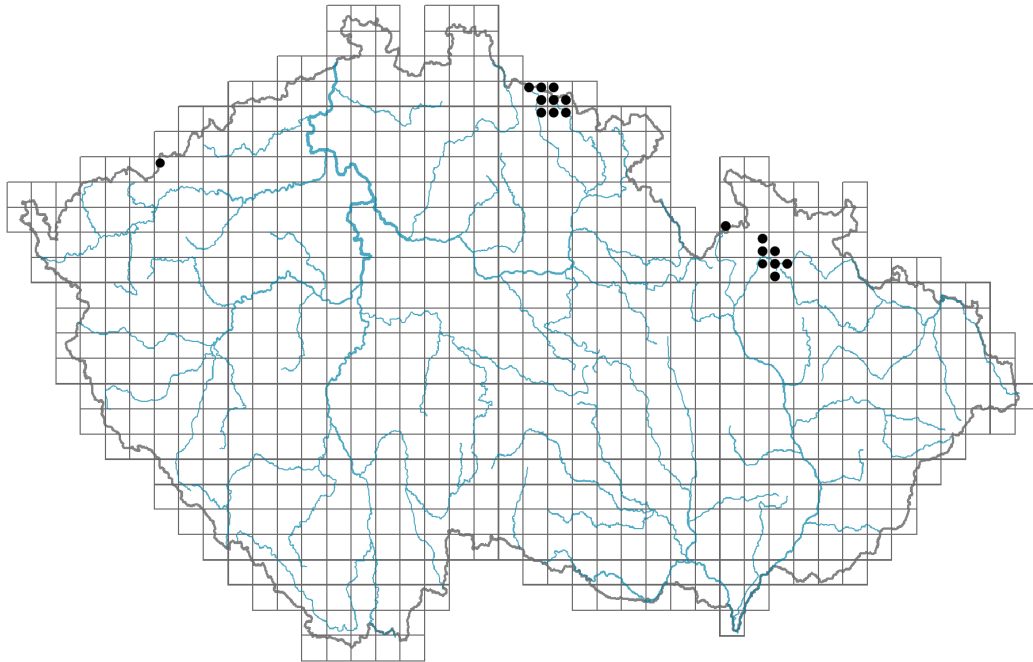


# Carex bigelowii

## Distribution



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### Map info

● revised records

○ unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.

## Habitus and growth type

Height [m]: **0.1-0.3**

Growth form: **clonal herb**

Life form: **hemicryptophyte**

Life strategy: **CSR - competitor/stress-tolerator/ruderal**

Life strategy (Pierce method based on leaf traits): **S/CSR**

Life strategy (Pierce method, C-score): **11.9 %**

Life strategy (Pierce method, S-score): **56.2 %**

Life strategy (Pierce method, R-score): **31.9 %**



© Dana Michalčová

## Leaf

Leaf presence and metamorphosis: **leaves present, not modified**

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**



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## Flower

Flowering period [month]: **June-July**

Flower colour: **black**

Perianth type: **flower achlamydeous**



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Inflorescence type: **spica e spiculis composita**  
 Dicliny: **monoecious**  
 Generative reproduction type: **facultative allogamy**  
 Pollination syndrome: **wind-pollination**

## Fruit, seed and dispersal

Fruit type: **dry fruit - nut enclosed in an utricle**  
 Fruit colour: **brown**  
 Reproduction type: **by seed/spores and vegetatively**  
 Dispersal unit (diaspore): **fruit, infrutescence or its part**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **probably non-myrmecochorous**

## Belowground organs and clonality

Shoot metamorphosis: **stolon, rhizome**  
 Storage organ: **stolon, rhizome**  
 Type of clonal growth organ: **hypogeogenous rhizome**  
 Freely dispersible organs of clonal growth: **absent**  
 Shoot life span (cyclicity): **dicyclic or polycyclic shoots prevailing**  
 Branching type of stem-derived organs of clonal growth: **sympodial**  
 Primary root: **absent**  
 Persistence of the clonal growth organ [year]:  
 Number of clonal offspring: **1.5**  
 Lateral spreading distance by clonal growth [m]: **0.1**  
 Clonal index: **4**

## Bud bank

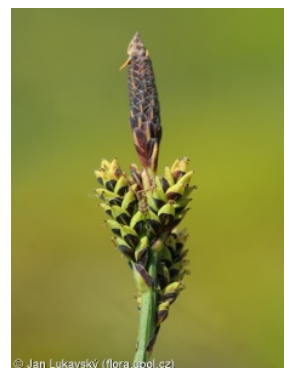
Number of buds per shoot at the soil surface (root buds excluded): **6**  
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded):  
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded):  
 Size of the belowground bud bank (root buds excluded): **21**  
 Depth of the belowground bud bank (root buds excluded) [cm]: **4**  
 Number of buds per shoot at the soil surface (root buds included): **6**  
 Number of buds per shoot at a depth of 0–10 cm (root buds included):  
 Number of buds per shoot at a depth greater than 10 cm (root buds included):  
 Size of the belowground bud bank (root buds included): **21**  
 Depth of the belowground bud bank (root buds included) [cm]: **4**

## Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**  
 Carnivory: **non-carnivorous**  
 Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## Karyology

Chromosome number (2n): **69**  
 Ploidy level (x): **2**



2C genome size [Mbp]: **824.09**  
1Cx monoploid genome size [Mbp]: **412.05**  
Genomic GC content: **36.5 %**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**

Temperature indicator value: **2 - transition between values 1 and 3**

Moisture indicator value: **6 - transition between values 5 and 7**

Reaction indicator value: **2 - transition between values 1 and 3**

Nutrient indicator value: **2 - transition between values 1 and 3**

Salinity indicator value: **0 - not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.1**

Herb layer disturbance frequency indicator value: **-1.1**

Whole-community disturbance severity indicator value: **0.21**

Herb layer disturbance severity indicator value: **0.26**

Whole-community structure based disturbance indicator value: **0.53**

Herb layer structure-based disturbance indicator value: **0.57**

## Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2A Alpine grasslands on siliceous bedrock: **2 - optimum**

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

5 Vegetation of springs and mires

5G Raised bogs: **2 - optimum**

5H Wet peat soils and bog hollows: **1 - rare occurrence**

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 - rare occurrence**

11 Heathlands and scrub

11A Dry lowland to subalpine heathlands: **1 - rare occurrence**

11D Subalpine acidophilous Pinus mugo scrub: **1 - rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Diagnostic taxon

Diagnostic taxon of classes: [AA Loiseleurio-Vaccinietea](#), [AB Juncetea trifidi](#)

Diagnostic taxon of alliances: [AAA Loiseleurio procumbentis-Vaccinion](#), [ABA](#)



**Juncion trifidi, ABB Nardo strictae-Caricion bigelowii, ADA Calamagrostion villosae**

Diagnostic taxon of associations: [AAA01 Avenello flexuosae-Callunetum vulgaris](#),  
[ABA01 Cetrario-Festucetum supinae](#), [ABB01 Carici bigelowii-Nardetum strictae](#),  
[ADA01 Sphagno compacti-Molinietum caeruleae](#)

Constant taxon

Constant taxon of classes: [AB Juncetea trifidi](#)

Constant taxon of alliances: [ABA Juncion trifidi](#), [ABB Nardo strictae-Caricion bigelowii](#)

Constant taxon of associations: [AAA01 Avenello flexuosae-Callunetum vulgaris](#),  
[ABA01 Cetrario-Festucetum supinae](#), [ABB01 Carici bigelowii-Nardetum strictae](#),  
[ADA01 Sphagno compacti-Molinietum caeruleae](#)

Dominant taxon

Dominant taxon of associations: [ABA01 Cetrario-Festucetum supinae](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **6.4**

Ecological specialization index for non-forest vegetation: **6.4**

## **Distribution and frequency**

Floristic zone: **arctic, boreal, northern temperate, southern temperate, submeridional**

Floristic region: **Europe, Siberia, Americas**

Distribution range extension along the continentality gradient: **5**

Elevational belt in the Czech Republic: **subalpine belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **12**

taxon.data.freq\_in\_quad: **20**

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **21.3 %**

Occurrence frequency in vegetation plots with a cover above 25%: **4.9 %**

Occurrence frequency in vegetation plots with a cover above 50%: **1.6 %**

Mean percentage cover in vegetation plots: **6.1 %**

Maximum percentage cover in vegetation plots: **63 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **7**

Number of narrow habitats in which the taxon has its optimum: **2**

Number of broad habitats in which the taxon occurs: **4**

Number of broad habitats in which the taxon has its optimum: **2**

## **Threats and protection**

Red List 2017 (national categories): **C2r - endangered taxon, rare**

Red List 2017 (IUCN categories): **EN - endangered**

Legal protection: **not protected by law**