

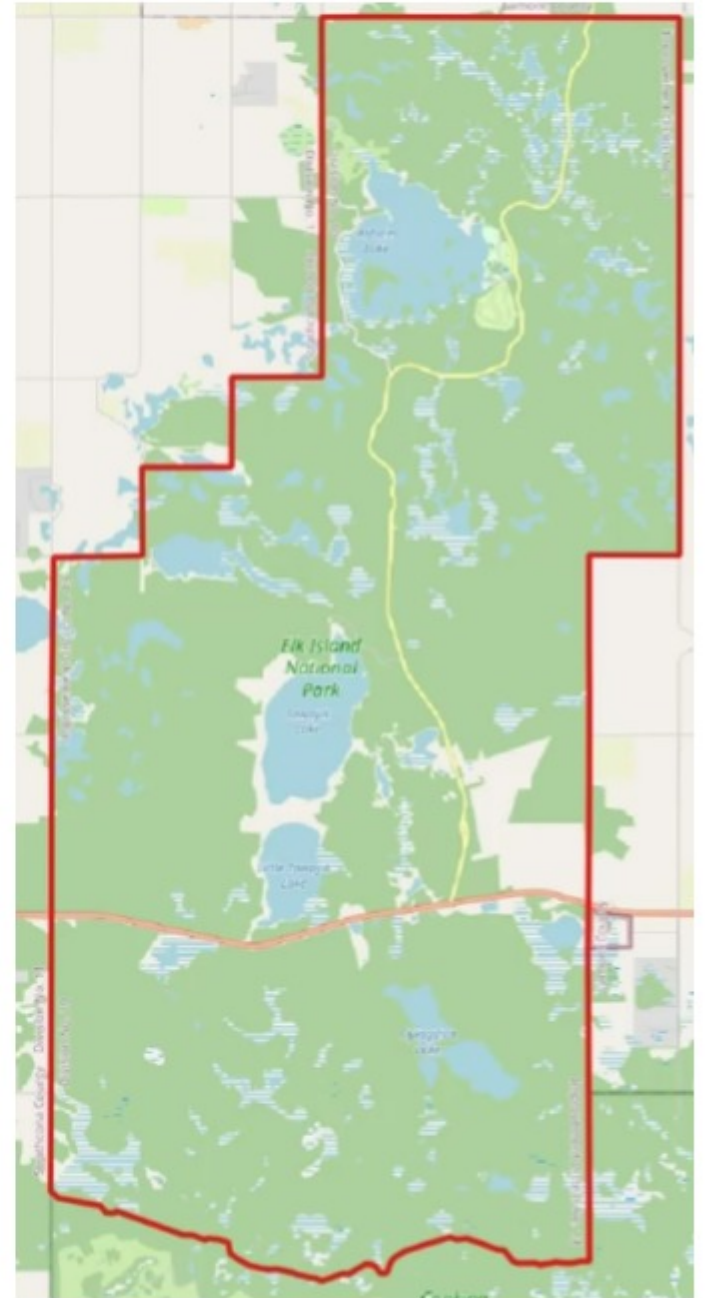
Project I

Elk Island National Park

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Elk Island National Park

- kanadischer Nationalpark
- 194 km² Fläche
- ca. 400.000 Besucher jährlich
- beheimatet über 42 Arten von Säugetieren
- insbesondere Bison und Elch



Ziele des Projekts

- Verhalten der Tiere im Park simulieren um besser auf Situationen reagieren zu können
- Bestimmung der carrying capacity

Bison, Elk, Moose



<https://exploredmonton.com/attractions-and-experiences/elk-island-national-park>

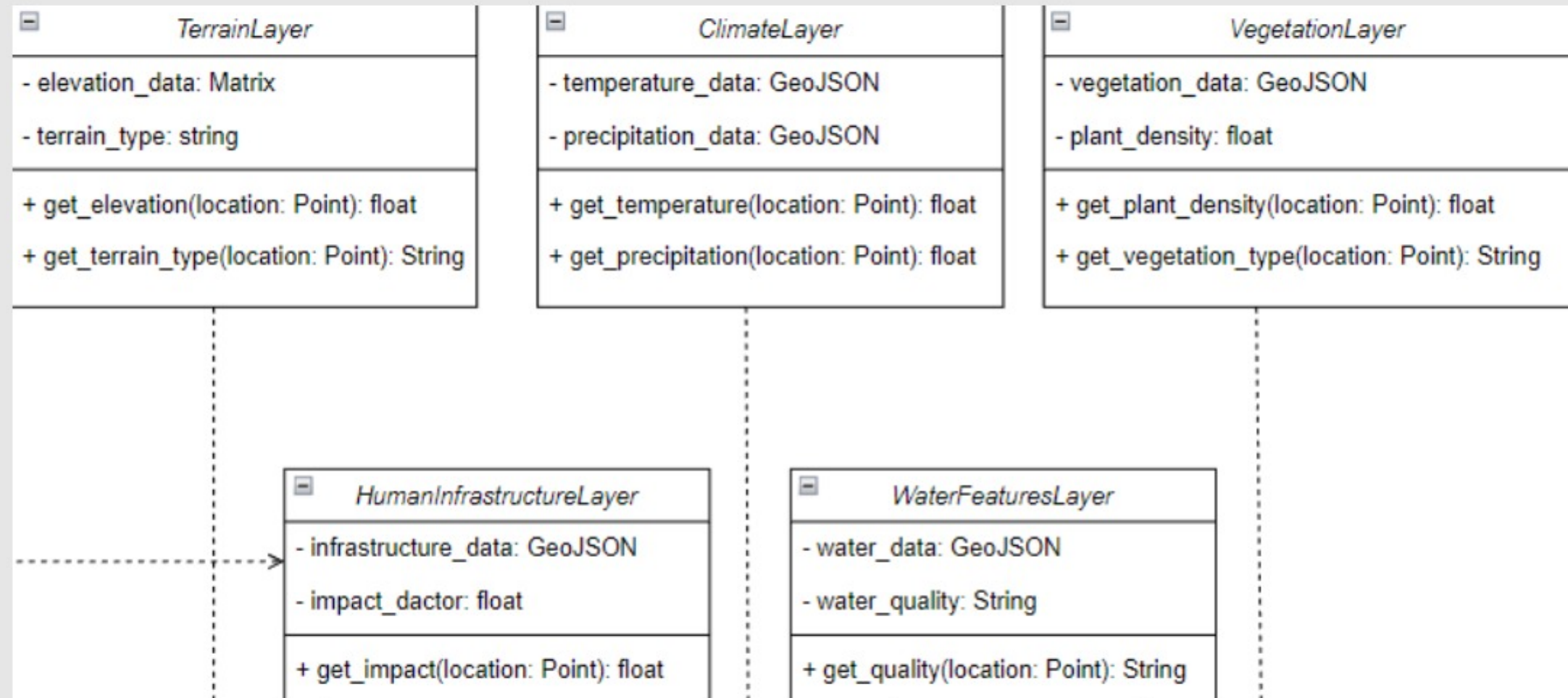


<https://naturealberta.ca/volunteer-with-friends-of-elk-island-society/>



<https://cdn.britannica.com/03/94603-050-D74D3709/elk-American-Yellowstone-National-Park-Wyoming.jpg><https://www.treehugger.com/moose-facts-5074548>

Layers



full version: https://github.com/Red-Sigma/proj-ki-geo/blob/main/design/elk_islan_np.drawio

Agents

<i>BisonAgent</i>
<ul style="list-style-type: none">- hydration: double- satiety: double- hoursWithoutWater: int- hoursWithoutFood: int- isAlive: bool- private int dailyEatingHours;
<ul style="list-style-type: none">+ give_birth(): BisonAgent+ mate(partner:BisonAgent): BisonAg+ graze(): void+ tick(): void+ moveToWatersource(): void+ UpdateDailyEatingHours(): void+ CheckSurvival (): void+ DoRandomWalk (): void+ MoveTowardsGrazingArea (): void

<i>ElkAgent</i>
<ul style="list-style-type: none">- antler_size: float- herd_leader: boolean
<ul style="list-style-type: none">+ graze(): void+ mate(partner:ElkAgent): ElkAgent+ give_birth(): ElkAgent+ tick(): void+ moveToWatersource(): void

<i>MooseAgent</i>
<ul style="list-style-type: none">- antler_size: float- long_legs: boolean
<ul style="list-style-type: none">+ browse(): void+ mate(partner:MooseAgent): MosseAgent+ give_birth(): MooseAgent+ graze(): void+ tick(): void+ moveToWatersource(): void

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Tools and Tech



QGIS



Google

