

Invasive Species in Kluane National Park and Reserve: 2016 Management



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Introduction

Invasive Species are non native plants, animals or fungi that have been introduced to an area out of its normal range. They impact biodiversity by competing with and often displacing native species. There are 20 invasive plants present in the Yukon (Yukon Invasive Species Council 2016). Kluane National Park and Reserve has 7 invasive plants present within and adjacent to its border.

Actions Taken 2016

Pulling and mapping of invasive plant patches

This year staff from Resource Conservation and Asset Management pulled plants at 9 sites on 5 different occasions (Table 1). The known locations of lucerne, sweet clover, butter and eggs and creeping thistle were managed twice this season and a few other new lucerne plants were found and pulled. We also mapped the locations of these patches (Figure 1). This visual map reference will make it easier to track the changes of patch size over time. The pulling and mapping of invasives this year took 54 people hours.

Investigation of new Tachāl Dhāl road

The Tachāl Dhāl road was renovated and resurfaced in the fall of 2015. Much new gravel was put in and it was greatly improved. Invasive species tend to like disturbed soils and there was a possibility that the gravel used for the road could have been contaminated with invasive seeds. The new road was patrolled and many plants were found to be growing out of the gravel, fortunately, none were invasive species.

Northern Iconic Experience Site

The proposed site near Bighorn Lake and the old horse trail was investigated for invasive species. No invasive species were found. It was speculated by Bruce Bennett that any invasives the horses would have eaten outside of the park would have passed through their system before their arrival on the horse trail along the Donjek Glacier or the proposed NIE site.



Figure 1: Invasive species mapped and pulled 2016

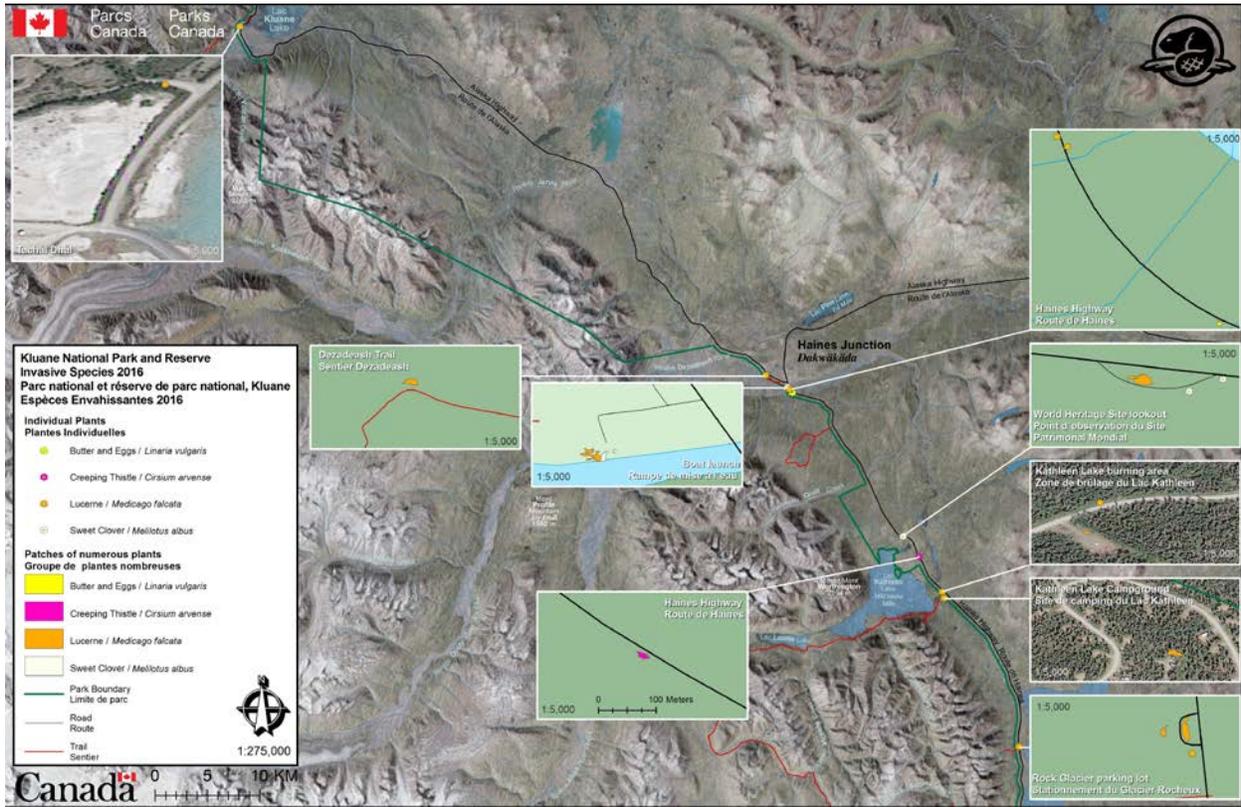


Table 1: Targeted areas for 2016 and people hours

| 2016 Targeted areas | Species | People hours |
|---|---------------------------|--------------|
| Rock Glacier Trail parking lot | Lucerne | 16 |
| Kathleen Lake campfire circle | Sweet Clover, Lucerne | 1 |
| World Heritage Site viewpoint | Lucerne, Sweet Clover | 16 |
| Haines highway corridor-by Kathleen Lake | Creeping Thistle | 3 |
| Haines highway corridor-by Dezadeash River | Butter and Eggs | 6 |
| Dezadeash River-boat launch area | Sweet Clover, Lucerne | 6 |
| Dezadeash River-between bridges | Lucerne | .5 |
| Dezadeash trail – NW side of loop | Lucerne | 1.5 |
| Tachāl Dhāl road | Patrol for any new plants | 4 |
| Kathleen Lake campground-road and slash pile burning area | Lucerne | .5 |
| | Total Hours | 54 |



Observations

The large patch of sweet clover between the two bridges of the Dezadeash River that we picked in 2015 was completely absent this year. Sweet clover can be an annual or biannual plant. This patch must be a biannual patch which should show up in 2017. A few new lucerne plants and patches were discovered and picked this year. One plant was found before the first gate on the Tachāl Dhāl road. It was not a new plant as the old dry plant stocks from previous years were present. A small patch of lucerne was discovered at the Kathleen Lake campground slash burning area as well as a few plants along the beginning of the road. A small patch of lucerne on the NW corner of the Dezadeash loop was picked this year as well. Lucerne is incredibly abundant from this point on from the Dezadeash loop down the old wagon road, along the highway and nearby fields. Staff was able to check the Dezadeash boat launch and the butter and eggs patch later in the season at the end of August. She reported that there were many plants to pull. If time permits it would be advantageous to visit the sites 3 times a summer to maximise our effect on these plants.

Gaps

Due to time constraints, the smooth brome in the Alsek Valley and the oxyeye daisy patch on the Mush Lake road were not assessed or mapped this year. The lucerne at the Administration building was not addressed this year as the area was under construction. Another invasive species that we have not addressed in the crested wheat grass. This grass is present along the highway across from the Alsek Valley and it would be good to check if it has encroached into the meadows at the beginning of the Alsek trail.

Recommendations

Many national parks in Canada spend much time and money controlling the invasive species that are present in their parks. Kluane National Park and Reserve has very few areas that we need to target in order to maintain control over the patches of invasives. The control of our invasive species patches in Kluane National Park is a relatively affordable activity for both time and cost. Staff hours pulling invasives totalled to 54 hours split between Asset Management and Resource Conservation. The yearly expenses for the program are fuel at about \$170 per season and about \$50 of clear plastic bags. In total the program costs are about \$220 plus staff time. The following are recommendations to follow for the 2017 season.

1. Continue with the current level of invasive species control.
2. Ensure the lucerne around the administration building is removed throughout the summer.
3. The patrol of the new Tachāl Dhāl road should continue for the next couple of years to ensure the early capture and removal of any invasive species.
4. Identify the extent of the smooth brome and crested wheat grass, with the help of local experts, in the Alsek Valley
5. Map and pull the smooth brome in the Alsek Valley.
6. Map the extent of the oxyeye daisy patch at the start of the Mush Lake road and speak to the owners of the land about their possible involvement.
7. Consider visiting the sites 3 times a season to maximise our effect on these plants.



References

Yukon Invasive Species Council. 2016. Yukon Invasive Species Council. Retrieved from <http://yukoninvasives.com/index.html>

