

大学院入学試験問題用紙

2022年度1期

科目名	受験専攻	受験番号	氏名
English	Forestry Doctoral course		

Q1. Summarise following text in English or in Japanese.

[Redacted text block]

Q2. Explain your master course research briefly in English.

大学院入学試験問題用紙

2022年度1期

科目名	受験専攻	受験番号	氏名
森林経営学 (forest management)	林学専攻 博士後期課程		

1. SDGsと森林経営の関係について論理展開をしてください。関係する内容ではなく論理展開や整理の仕方について評価をします。

How do you discuss relations between some goals of SDGs and forest management? The answer is evaluated by the way of discussion.

2. 「持続可能な森林経営」をどのように判断しますか。ストックとフローの内容に注目して説明しなさい。

How do you evaluate as "sustainable forest management"? Explain focuses on contents of stock and flow.

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2022年度1期

科目名	受験専攻	受験番号	氏名
林産化学	林学専攻 博士後期課程		

問題 きのこの健康増進に関するわが国の社会的な認知度と問題点を明記し、特用林産物としての価値を高めるための科学研究手法について倫理にも触れて解説しなさい。

大学院入学試験問題用紙

2022年度2期

科目名	受験専攻	受験番号	氏名
英語	林学 専攻 博士後期 課程		

問1 次の英文を読んでその概要を日本語で記述しなさい。

In the Canadian Galapagos of Haida Gwaii, the very survival of western redcedar is under threat. This is a tree species of great ecological, cultural, and economic importance, particularly to the coastal First Nations. This “tree of life” is used in their various art forms, including totem poles, woven hats, and baskets. However, redcedar is at serious risk of being obliterated from this legendary landscape due to the introduction of a non-native species, the Sitka black-tailed deer.

Missionaries introduced deer to Haida Gwaii in the late 1800s as a way to diversify food sources for the islands’ inhabitants. Without a natural predator, the deer have colonized most of the approximately 250 islands in the archipelago at the phenomenal densities of 13-30 deer per km² on the largest islands and even higher on the smaller islands. Redcedar is highly palatable to deer, resulting in low regeneration. The redcedar growing on Haida Gwaii is particularly susceptible to consumption as it contains fewer natural defense compounds than redcedar on the mainland.

The poor regeneration of redcedar due to uncontrolled deer browsing, combined with its historic high harvesting rates, suggest a bleak future for redcedar on Haida Gwaii. However, there may be reason for optimism on the horizon. Catch Catomeris, a Masters student in the Department of Forest and Conservation Sciences, and her supervisor, Dr Sue Grayston, have teamed up with Haida-owned Taan forest. Together with the FSC-certified forestry company, the researchers are investigating methods to improve redcedar regeneration and survival in the presence of deer. These include the use of deer repellents and the inoculation of soil with fungi beneficial to redcedar.

Since the introduction of the Land Use Objectives Order on Haida Gwaii in 2011, forestry companies are obligated to plant redcedar encased within protective cones in order to prevent browse damage by deer. Unfortunately, these cones are not only costly to purchase and maintain, but can also negatively impact seedling growth. As part of her research, Catch assessed the effectiveness of 2 deer repellents as potential alternatives to the protective cones. The repellents she tested were wolf urine and a commercially available deer repellent. In one short-term study, using redcedar placed in a cutblock, Catch found that wolf urine reduced browse damage on redcedar boughs by almost a third relative to untreated controls. In a separate study, which is still ongoing, catch planted redcedar seedlings in the cutblock and treated them with a commercially-available deer repellent. Early results are promising, and this repellent appears to be successful in reducing herbivore damage to the seedlings.

Haida Gwaii: カナダ・ブリティッシュコロンビア州の西岸に位置する諸島。

Haida-owned Taan forest: ハイダ族が所有する林業会社 Taan (ハイダ語で森の意)

出典 Susan B Watts ed., “branchlines”, Volume 28 # 4 Winter 2017, Faculty of Forestry, UBC, p.16

問2 あなたが取り組んだ修士論文の題目案およびその研究内容の概要を英文で記述しなさい。

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2022年度2期

科目名	受験専攻	受験番号	氏名
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2022年度2期

科目名	受験専攻	受験番号	氏名
森林生態学	林学 専攻 博士後期 課程		
<p>問1 クマ類の食欲亢進期はどのような機序によって起こるか。</p> <p>問2 クマ類を含む野生哺乳類の栄養状態を評価するための手法を複数例説明せよ。</p>			