

Herbariums: Rooting for Diversity

Alana Benoit, Fran Leishman, Simon Landhäuser
Department of Renewable Resources, University of Alberta

Introduction

- A herbarium is a collection of pressed plants used for research and education. It also provides a reference for species' distribution, traits, and environment.¹
- Plant identification is important because it allows us to determine which plants are present so that we can preserve the biodiversity in an ecosystem.
- Plants are identified based on common characteristics which place them into groups.



Figure 1: This is a herbarium where plants are preserved for future reference.

Methods

Collecting



Figure 2: I collected species native to Alberta.

Identifying

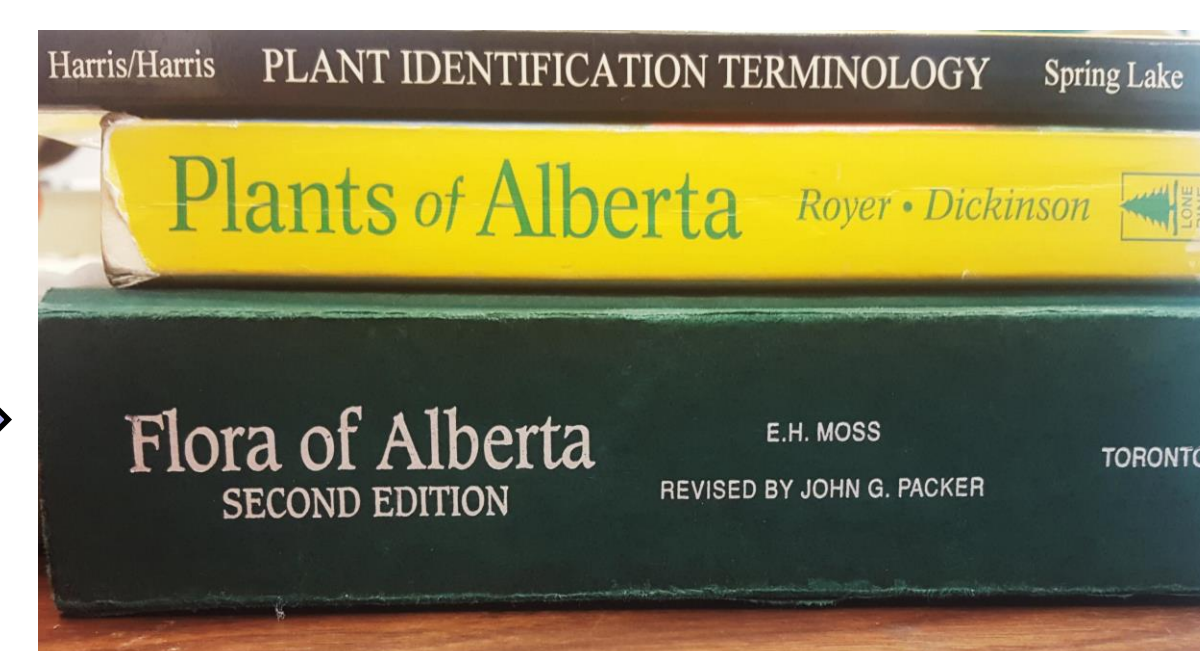
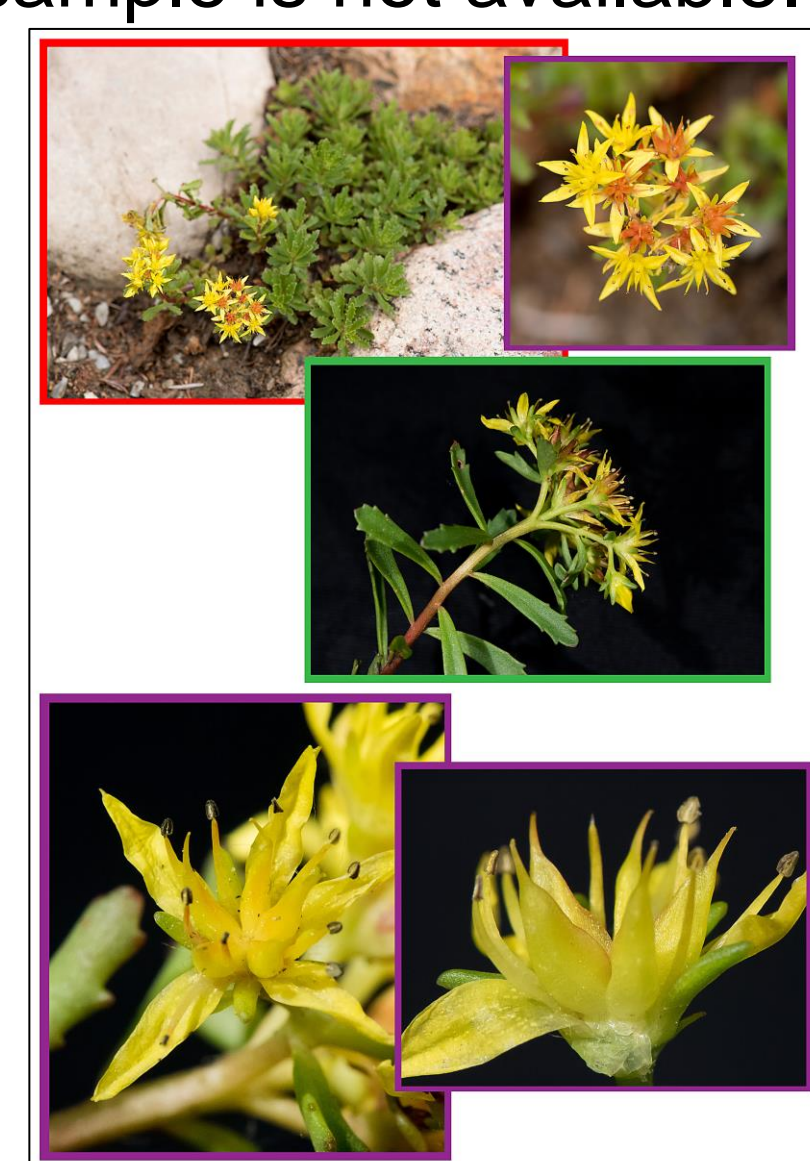


Figure 3: These books are used to identify plants through descriptions, pictures, and diagrams.

Figure 4: Key sheets show identifying characteristics for identifying plants when a sample is not available.



Pressing



Figure 5: Pressing plants dries and preserves them for future use.

Mounting



Figure 6: A pressed plant is taped or glued to mounting paper along with an identification tag.

Results



Figure 7: These are the plants I collected and pressed for my herbarium.

Forest Overview

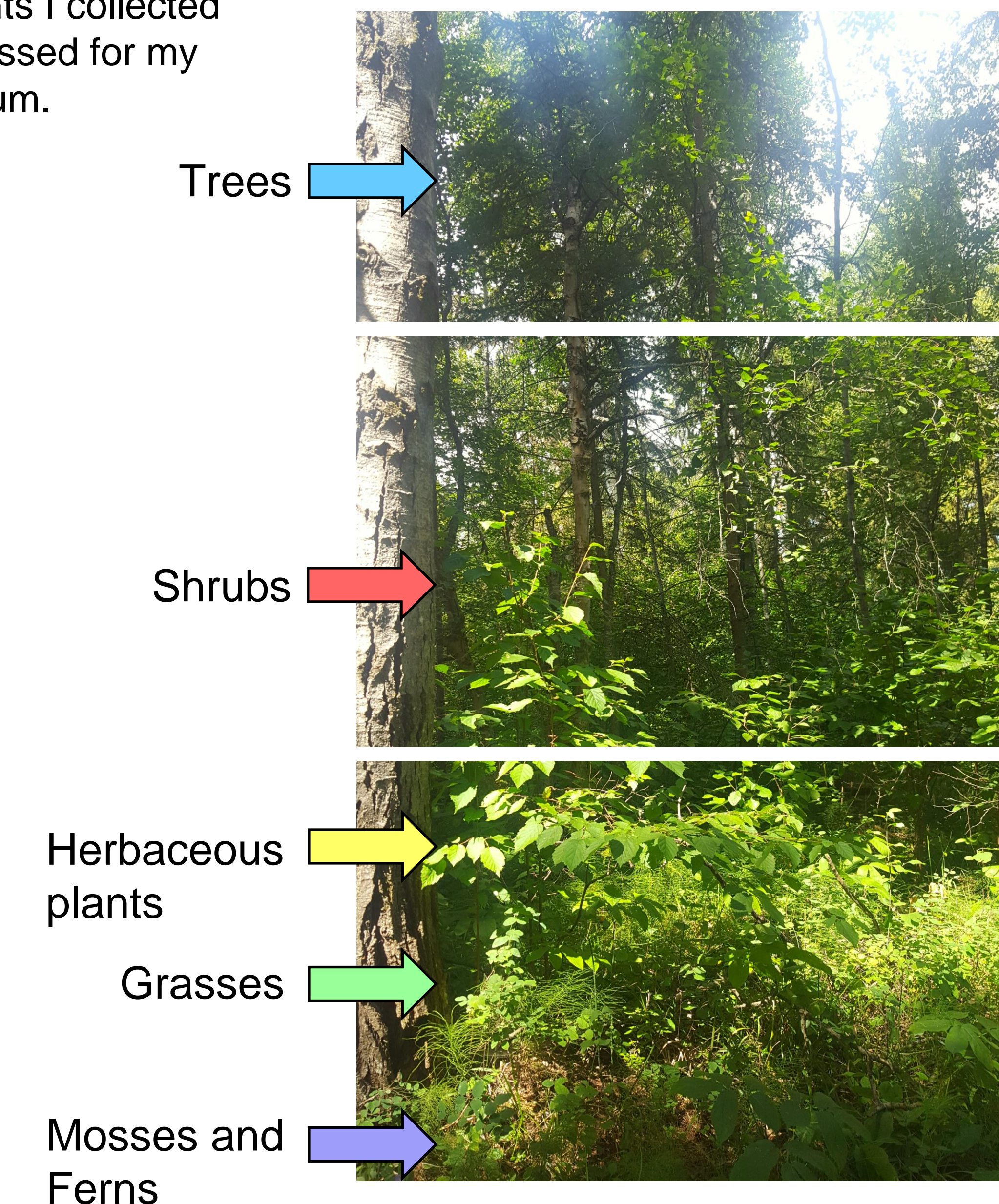


Figure 8: All the plants I collected play a role in the forest. Each part of the forest is connected with each other.

Conclusions

- Plant identification skills are needed in the restoration of ecosystems.
- Before operations that will disturb an ecosystem can take place, the existing vegetation must be properly identified so it can be restored to its original state.
- Herbariums are important for restoration because they give an idea of what the disturbed area needs to be returned to.



Figure 9: An open pit mine is a disturbance which needs to be restored once the operation is finished.



Figure 10: When land is restored, it should have much diversity to ensure the ecosystem is resilient to disturbances.

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Literature Cited

- (1) M.Greve, A.M. Lykke, C.W. Fagg, R.E. Gereau, G.P. Lewis, R. Marchant... J.C. Svenning. (2016) . Realising the potential of herbarium records for conservation biology. South African Journal of Botany, 105, 317-323.