



RESOURCE PRACTICES BRANCH

Species Monitoring Report

Province

Summary Charts and Graphs

May 2012



Data Sources

This publication's sourced data is based primarily on the Reporting Silviculture Updates and Land Status Tracking System (RESULTS) database for all graphs and charts, except for the Harvest Billing graphs which are based on a combination of RESULTS data and the Forest Tenures Administration (FTA) database.

All charts and graphs represent tree species frequencies reported into the databases for Crown land activities only and are derived from all funding sources (public and private).

Acknowledgements

The majority of the database queries, chart and graph production provided by Mei-Ching Tsoi, Consultant. Final compilation and production of the visuals provided by Dave Weaver, with direction and assistance from Ralph Winter and Kevin Astridge of the Resource Practices Branch. Special thanks to Francesco Cortini, Consultant for his design and Excel formatting assistance.

Publication dates

This publication is dated May 2012. Data presented in this publication is based on RESULTS / FTA/HBS database queries up to March 2012.

Table of Contents

Page

Landscape Level, Species in the current inventory.....	6
Landscape Level, Species at Harvest.....	6
Landscape Level, Species at Planting.....	7
Landscape Level, Species Diversity Index at Planting.....	7
Landscape Level, Species at ≥ 7 years of age Regeneration.....	8
Landscape Level, Species Diversity Index at ≥ 7 years of age Regeneration	8
Stand Level – Monoculture, Species Previous Stand Label.....	9
Stand Level – Monoculture, Species at Planting.....	9
Stand Level – Monoculture, Species at ≥ 7 years of age Regeneration.....	9

Report Introduction, Explanations and Accompanying Data Package Uses

1.0 Report Introduction

The primary focus of this report is identification of commercial tree species composition at the Province level and the ability to monitor the changes in these species over time. Use of the graphs generated in this report will aid forest managers at the Province level to measure achievement of species management goals and aid in the design of future goals, based on the trends presented. The intent is for the Resource Practices Branch to produce these reports annually and to make them available for all forest managers within the province. This initial production is based on data up to March 2012. The goal is to produce these reports in September at the same time as the provincial Annual Silviculture Reports.

2.0 List of Graphs produced - including definitions and descriptions of data origin

Landscape Level Graphs

1) Species in the Current Inventory

- Data originates from previous stand type (recorded in RESULTS).
- Disturbance Start Year: means the year that the harvest began on the stand.

2) Species at Harvest

- Data originates from the Harvest Billing System (HBS) for all species scaled at harvest.

3) Species at Planting

- Disturbance Start Year: means the year that the harvest began for the stand. The planting may have been done 2 or more years later. The graph illustrates what was planted on harvested areas, harvested in that calendar year.
- Data originates from planting activity reporting in RESULTS and includes all planting and fill planting.

4) Species Diversity Index at Planting

- Berger-Parker Index (BPI) Definition: the BPI expresses the proportion of the most abundant species. Therefore, the monoculture cut off of 80% is a BPI of 0.8. Then 70% Pli would be 0.7, and 100% would be 1.0.

5) Species at ≥ 7 years of age Regeneration

- The graph illustrates which tree species were regenerated on harvested areas disturbed in the corresponding calendar year.
- Species at ≥ 7 years of age Regeneration: means the species of the inventory component of the stand that is stocked with trees that are greater than or equal to 7 years old.

- Data originates from silviculture data contained in RESULTS and is reflecting expected Free Growing stand conditions.

6) Species Diversity Index at ≥ 7 years of age Regeneration

- Berger-Parker Index (BPI) Definition: the BPI expresses the proportion of the most abundant species. Therefore the monoculture cut off of 80% is a BPI of 0.8. Then 70% Pli would be 0.7, and 100% would be 1.0.

Stand Level Monoculture Graphs

7) Species Previous Stand Label

- Monoculture: means one tree species makes up $\geq 80\%$ of the tree species in the stand
- Mixed: means two or more tree species comprise the stand and no species comprises $\geq 80\%$ of the stand.
- Data originates from pre-disturbance Inventory Labels (recorded in RESULTS) and expressed as a proportion of the stands (polygons) within the Province.
- Disturbance Start Year: means the year that the harvest began on the stand.

8) Species at Planting

- Disturbance Start Year: means the year that the harvest began for the stand. The planting may have been done 2 or more years later. The graph illustrates what was planted on harvested areas, disturbed in that calendar year.

9) Species at > 7 years of age Regeneration

- Species at ≥ 7 years of age Regeneration: means the species of the inventory component of the stand that is stocked with trees that are greater than or equal to 7 years old.
- Data originates from silviculture data contained in RESULTS and is reflecting expected Free Growing stand conditions.

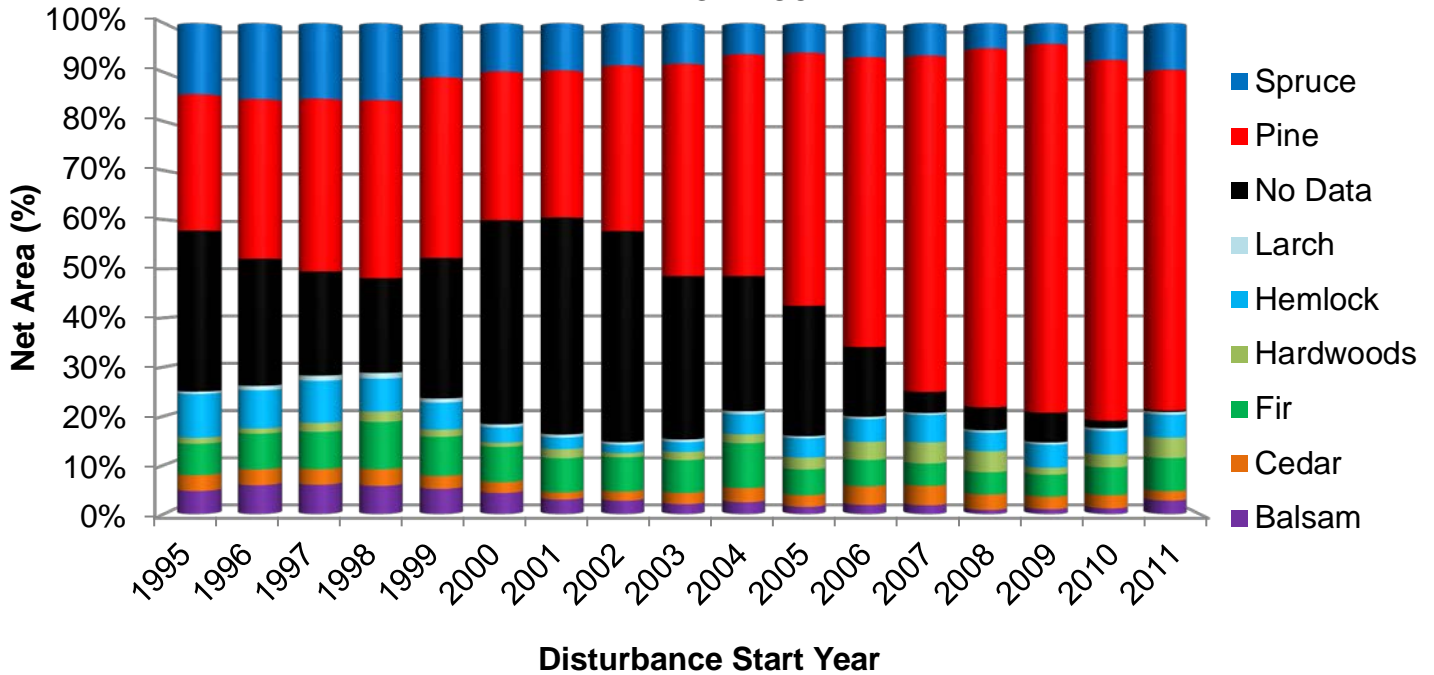
3.0 Accompanying Data Package Uses

All reports for each TSA will be accompanied by the complete data package in Excel format – which includes all of the parameters per data point. Therefore, the intent is to allow forest managers to perform further filtering of the data to generate other reports more detailed or specifically targeted to local objectives. For example, if the local requirement is to generate similar graphs as this report, but by BEC subzone per TSA, access has been provided to amend the pivot tables to produce specific new graphics. Users are encouraged to explore the data contained in the accompanying package and tailor other reports to their specific needs.

Landscape Level

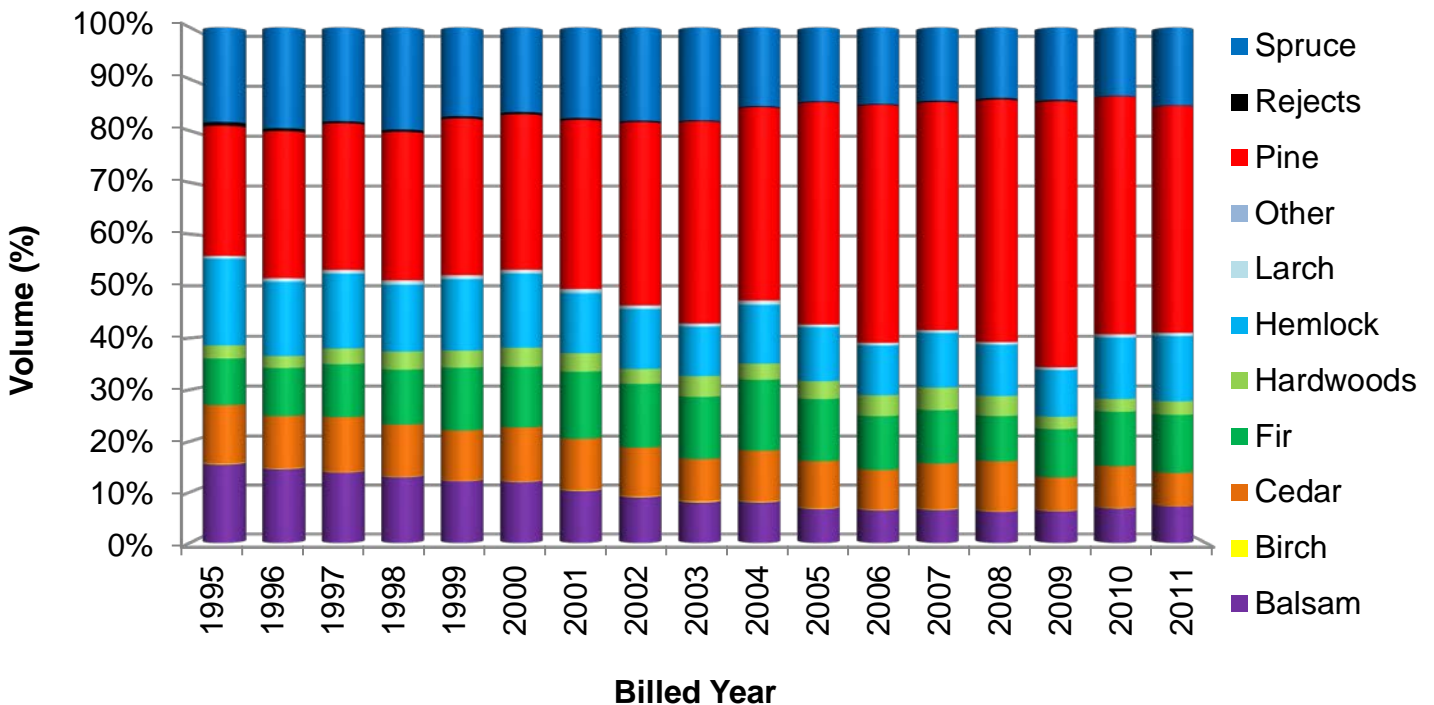
Species in the Current Inventory

Landscape Species Monitoring - Previous Stand Species - Province



Species at Harvest

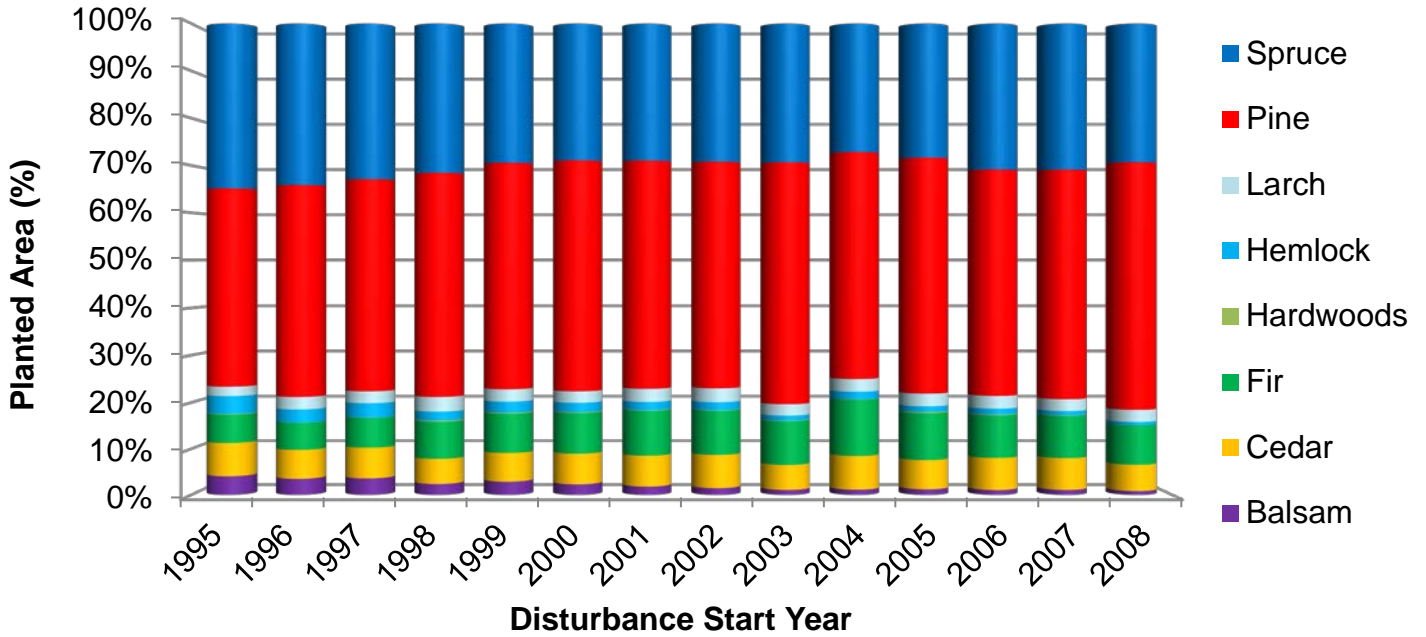
Landscape Species Monitoring - HBS Billed Species Province



Landscape Level

Species at Planting

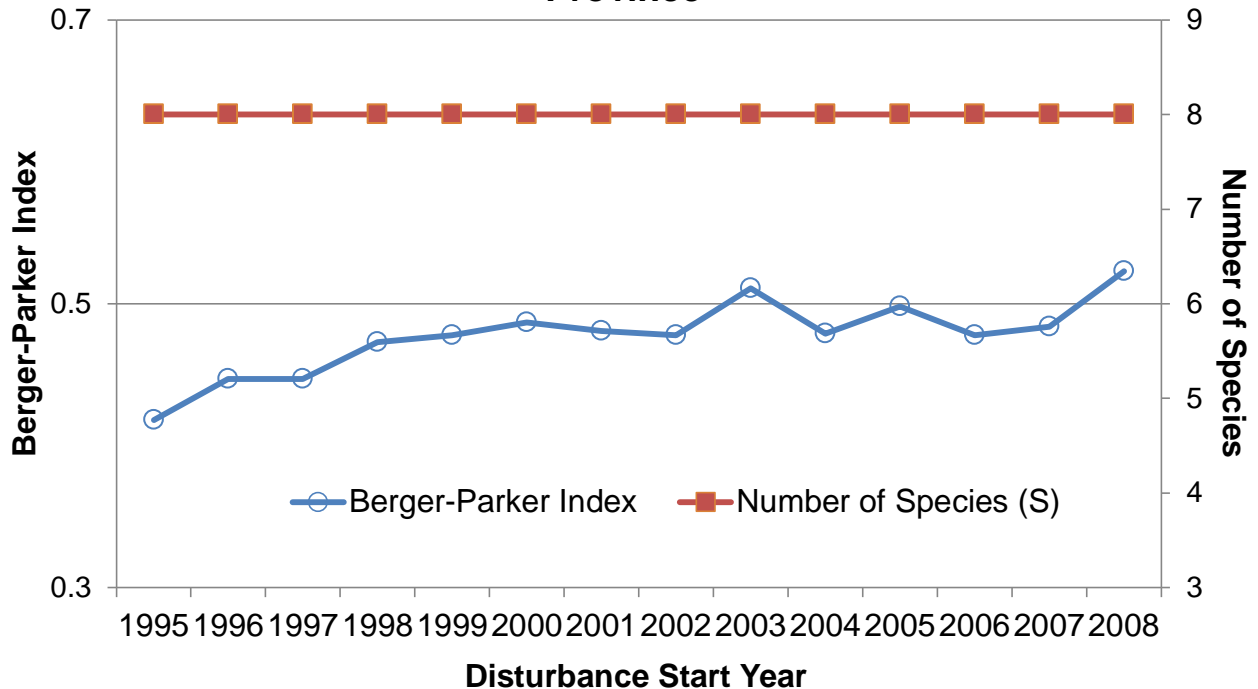
Landscape Species Monitoring - Planted Species Province



Species Diversity Index at Planting

The Berger-Parker Index (BPI) is the proportion of the most abundant species.

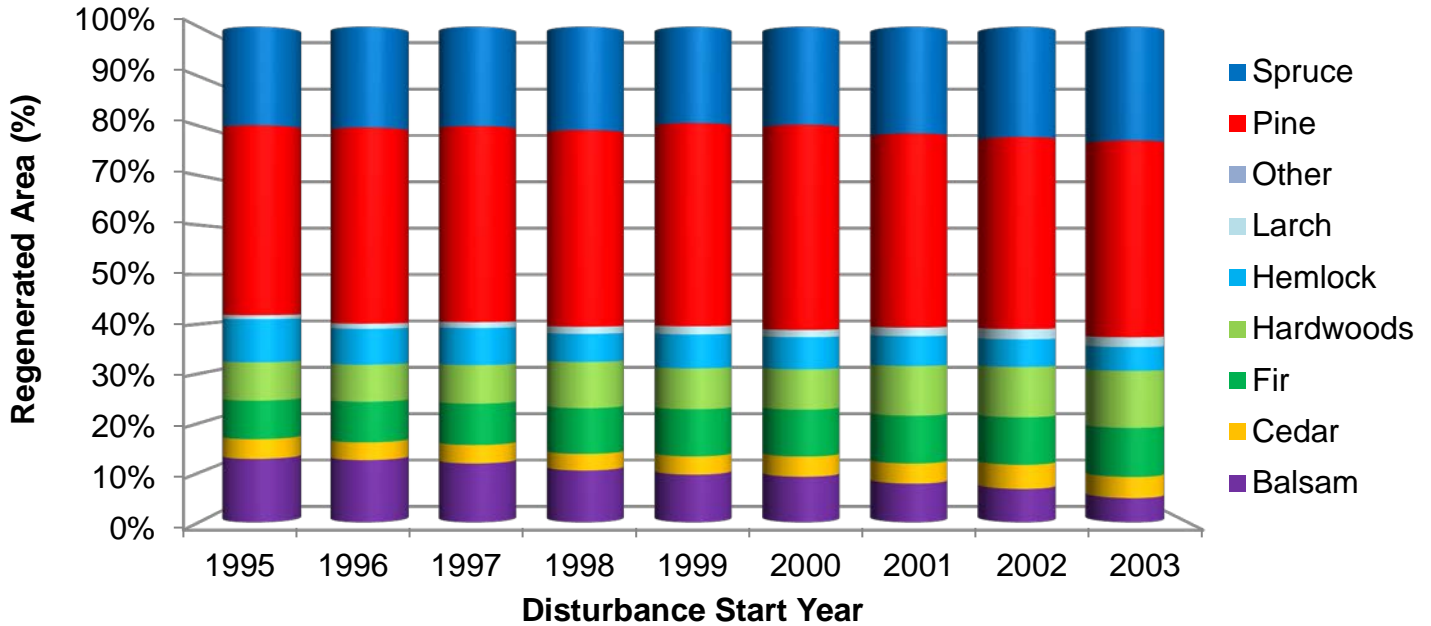
Planting - Berger-Parker Index and Number of Species Province



Landscape Level

Species at ≥ 7 years of age Regeneration

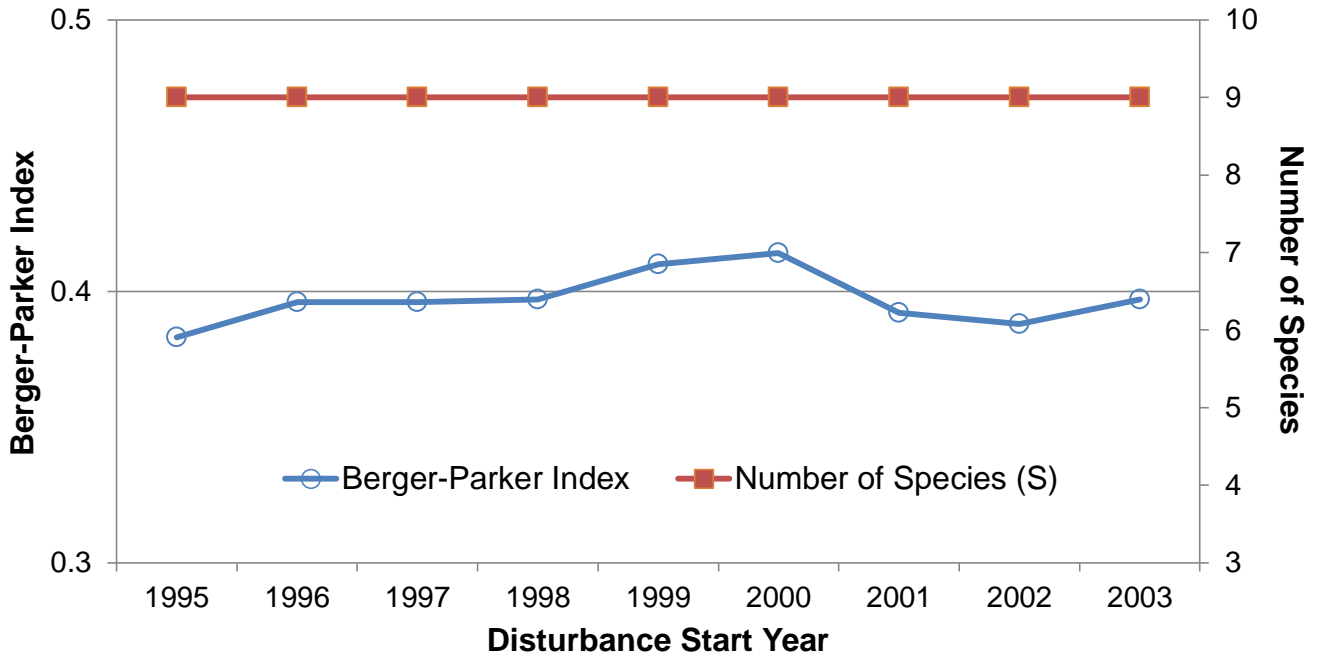
Landscape Species Monitoring - Regenerated Stand Species Province



Species Diversity Index at ≥ 7 years of age Regeneration

The Berger-Parker Index (BPI) is the proportion of the most abundant species.

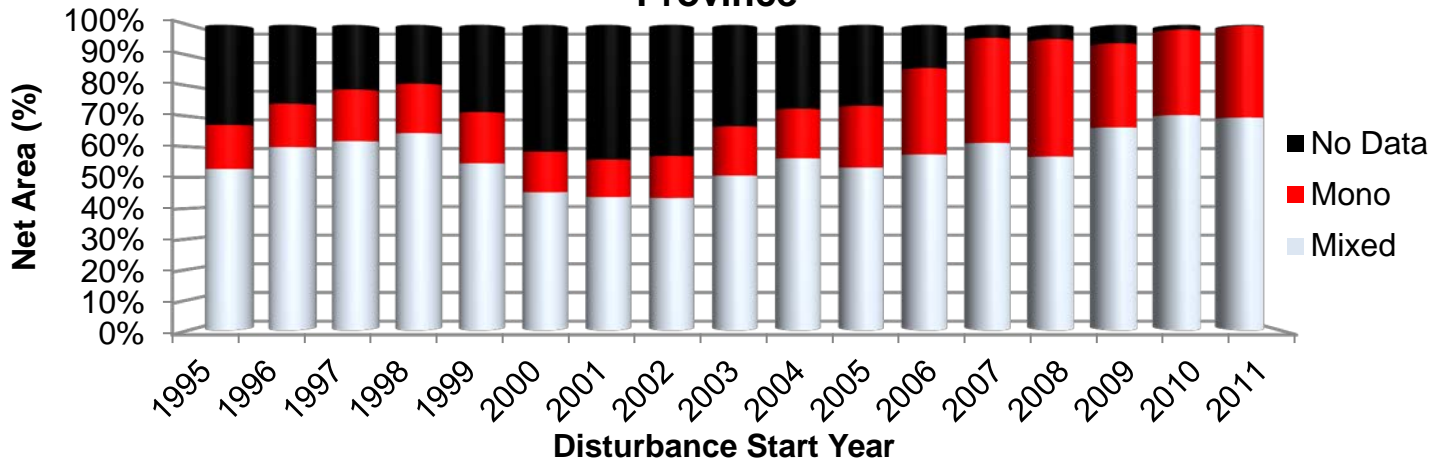
Regenerated- Berger-Parker Index and Number of Species Province



Stand Level - Monoculture

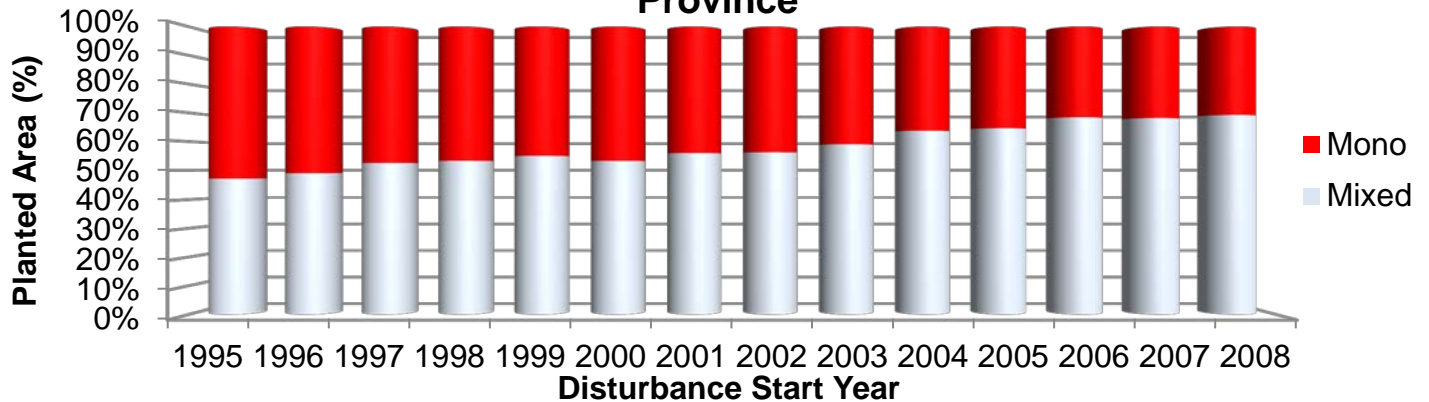
Species Previous Stand Label

Stand Level Species Monitoring - Previous Stand Label Province



Species at Planting

Stand Level Species Monitoring - Planting Province



Species at ≥ 7 years of age Regeneration

Stand Level Species Monitoring - Regenerated Species Province

