



MANAGEMENT NOTES

Number 6

SEED SOURCES USED IN FOREST PLANTATIONS IN PRINCE EDWARD ISLAND

1938-1994 updated to 1998

by William M. Glen, 1994
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Background

Visitation to a number of older plantations across the province has shown significant variation in growth and stem quality that can not be explained by the differences in site quality. The seed source used in the production of nursery stock appears to be a major factor in this variation. This report documents what has been found regarding the sources of seed or seedlings used in the province during the past 50+ years.

Methodology

The following sources were used to assemble the information, namely;

- surviving records of seed or seedling acquisition
- records of agencies supplying seed or seedlings
- recollections of former and current staff of the P.E.I. Forestry Service and the P.E.I. National Park

The success of these methods in providing information has been variable due to lack of records, the quality of the surviving records and the dimming of recollections of individuals over time.

The information provided is listed by the year in which the nursery stock was planted, not when the seed or seedlings were acquired. The sources listed with a "?" are probable (i.e. previous seed or seedlings were acquired from that source, or a record of seed collection was found) and those with "???" are likely (i.e. recollections that all white spruce seed was collected locally). The portion of the information preceding the "?" or "???" is that which is questionable (i.e. some reports state that the seed came from a seed house in New York, so the name of the seed house is not definitive).

Specific provenance or family tests established by the P.E.I. Forestry Service, Tree Improvement Program or the Canadian Forestry Service are excluded from this listing.

Planting

Year	Species	Agency	Source of Seed or Seedlings
1938	WHITE SPRUCE	UNKNOWN	UNKNOWN
1941	DOUGLAS FIR	NATIONAL PARK	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1942	RED PINE	NATIONAL PARK	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1942	WHITE SPRUCE	NATIONAL PARK	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1943	RED PINE	NATIONAL PARK	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1944	RED PINE	NATIONAL PARK	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1946	RED PINE	NATIONAL PARK	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1946	RED PINE	FEDERAL AGRICULTURE	ONTARIO PURCHASE?? by PEI GOVERNMENT
1946	NORWAY SPRUCE	NATIONAL PARK	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1947	RED PINE	NATIONAL PARK	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1948	RED PINE	NATIONAL PARK	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.

1950	RED PINE	NATIONAL PARK	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1950	RED PINE	PEI FORESTRY SERVICE	ONTARIO DEPT. OF LANDS AND FORESTS

1951	RED PINE	PEI FORESTRY SERVICE	ONTARIO DEPT. OF LANDS AND FORESTS
1951	WHITE PINE	PEI FORESTRY SERVICE	ONTARIO DEPT. OF LANDS AND FORESTS
1951	NORWAY SPRUCE	PEI FORESTRY SERVICE	QUEBEC DEPT OF LANDS & FORESTS

1952	RED PINE	PEI FORESTRY SERVICE	ONTARIO DEPT. OF LANDS AND FORESTS
1952	WHITE PINE	PEI FORESTRY SERVICE	ONTARIO DEPT. OF LANDS AND FORESTS?

1953	WHITE SPRUCE	PEI FORESTRY SERVICE	UNKNOWN
1953	WHITE SPRUCE	FEDERAL AGRICULTURE	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1953	WHITE PINE	FEDERAL AGRICULTURE	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1953	RED PINE	PEI FORESTRY SERVICE	ONTARIO DEPT. OF LANDS AND FORESTS
1953	RED PINE	PEI FORESTRY SERVICE	ACADIA F.E.S., FREDERICTON, N.B. OR FREYBURG, MAINE
1953	WHITE PINE	PEI FORESTRY SERVICE	ACADIA F.E.S., FREDERICTON, N.B. OR FREYBURG, MAINE
1953	RED PINE	FEDERAL AGRICULTURE	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N. B.
1953	NORWAY SPRUCE	PEI FORESTRY SERVICE	ACADIA F.E.S., FREDERICTON, N.B. OR FREYBURG, MAINE
1953	NORWAY SPRUCE	FEDERAL AGRICULTURE	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.

1954	RED PINE	PEI FORESTRY SERVICE	ONTARIO DEPT. OF LANDS AND FORESTS
1954	WHITE PINE	PEI FORESTRY SERVICE	ONTARIO DEPT. OF LANDS AND FORESTS
1954	SCOTS PINE	PEI FORESTRY SERVICE	DEPT OF LANDS & FORESTS, LAURENCETOWN, NOVA SCOTIA
1954	SCOTS PINE	FEDERAL AGRICULTURE	ACADIA FOREST EXPERIMENTAL STATION, FREDERICTON, N.B.
1954	NORWAY SPRUCE	PEI FORESTRY SERVICE	DEPT OF LANDS & FORESTS, LAURENCETOWN, NOVA SCOTIA
1954	LODGEPOLE PINE	PEI FORESTRY SERVICE	DEPT OF LANDS & FORESTS, LAURENCETOWN, NOVA SCOTIA
1954	EUROPEAN LARCH	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?

1955	EUROPEAN LARCH	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?
1955	RED PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1955	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION??
1956	CEDAR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1956	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1956	RED PINE	PEI FORESTRY SERVICE	ONTARIO DEPT. OF LANDS AND FORESTS
1956	EUROPEAN LARCH	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?
1957	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1957	NORWAY SPRUCE	PEI FORESTRY SERVICE	ESSEX & CLINTON COUNTIES, NEW YORK, VIA HERBST BROS. SEEDSMEN INC
1957	RED PINE	PEI FORESTRY SERVICE	ONTARIO DEPT. OF LANDS AND FORESTS
1957	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1957	CEDAR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1958	SCOTS PINE	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK
1958	WHITE PINE	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?
1958	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1958	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1958	NORWAY SPRUCE	PEI FORESTRY SERVICE	ESSEX & CLINTON COUNTIES, NEW YORK, VIA HERBST BROS. SEEDSMEN INC
1959	EUROPEAN LARCH	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK?, NEW YORK
1959	AUSTRIAN PINE	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?
1959	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1960	RED PINE	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK?, NEW YORK
1960	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1960	CEDAR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1960	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1960	DOUGLAS FIR	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK?, NEW YORK
1960	WHITE PINE	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK??
1960	WHITE ASH	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?
1961	AUSTRIAN PINE	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?
1961	WHITE PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1961	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1961	DOUGLAS FIR	PEI FORESTRY SERVICE	UNKNOWN
1961	RED PINE	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK?, NEW YORK
1961	NORWAY SPRUCE	PEI FORESTRY SERVICE	ESSEX & CLINTON COUNTIES, NEW YORK, VIA HERBST BROS. SEEDSMEN INC
1961	SCOTS PINE	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK?, NEW YORK
1962	CEDAR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1962	WHITE ASH	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK?, NEW YORK
1962	SCOTS PINE	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK?, NEW YORK
1962	RED PINE	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW

				YORK?, NEW YORK
1962	WHITE BIRCH	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1962	WHITE SPRUCE	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1962	EUROPEAN LARCH	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK?, NEW YORK
1962	AUSTRIAN PINE	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK?, NEW YORK

1963	RED PINE	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK?, NEW YORK
1963	BALSAM FIR	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1963	ASH GREEN?	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?

1964	SCOTS PINE	PEI FORESTRY SERVICE		PEI BULK COLLECTION?
1964	WHITE SPRUCE	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1964	DOUGLAS FIR	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK?, NEW YORK
1964	RED PINE	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1964	REDDISH SPRUCE	PEI FORESTRY SERVICE		PEI BULK COLLECTION

1965	NORWAY SPRUCE	PEI FORESTRY SERVICE		ESSEX & CLINTON COUNTIES, NEW YORK, VIA HERBST BROS. SEEDSMEN INC
1965	SCOTS PINE	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK??
1965	CEDAR	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1965	RED PINE	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK??
1965	BALSAM FIR	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1965	WHITE SPRUCE	PEI FORESTRY SERVICE		PEI BULK COLLECTION

1966	WHITE PINE	PEI FORESTRY SERVICE		PEI BULK COLLECTION GARFIELD/CULLODEN
1966	DOUGLAS FIR	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?
1966	AUSTRIAN PINE	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK??
1966	EUROPEAN LARCH	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?
1966	WHITE SPRUCE	PEI FORESTRY SERVICE		PEI BULK COLLECTION

1967	WHITE PINE	PEI FORESTRY SERVICE		PEI BULK COLLECTION GARFIELD/CULLODEN
1967	REDDISH SPRUCE	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1967	WHITE SPRUCE	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1967	NORWAY SPRUCE	PEI FORESTRY SERVICE		ESSEX & CLINTON COUNTIES, NEW YORK, VIA HERBST BROS. SEEDSMEN INC
1967	DOUGLAS FIR	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK??
1967	AUSTRIAN PINE	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?

1968	WHITE SPRUCE	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1968	BLACK SPRUCE	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1968	RED SPRUCE	PEI FORESTRY SERVICE		ADIRONDACS
1968	DOUGLAS FIR	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK??
1968	WHITE PINE	PEI FORESTRY SERVICE		PEI BULK COLLECTION GARFIELD/CULLODEN
1968	AUSTRIAN PINE	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?

1969	BALSAM FIR	PEI FORESTRY SERVICE		PEI BULK COLLECTION
1969	BLACK SPRUCE	PEI FORESTRY SERVICE		PEI BULK COLLECTION?
1969	AUSTRIAN PINE	PEI FORESTRY SERVICE		HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?

1969	RED SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1969	CEDAR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1969	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1969	SCOTS PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION

1970	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1970	RED PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1970	AUSTRIAN PINE	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK?
1970	WHITE PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION GARFIELD/CULLODEN
1970	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1970	SCOTS PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1970	RED SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1970	BLACK SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION

1971	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1971	SCOTS PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1971	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION

1972	WHITE PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1972	DOUGLAS FIR	PEI FORESTRY SERVICE	HERBST BROS. SEEDSMEN INC, NEW YORK, NEW YORK??
1972	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1972	RED PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1972	SCOTS PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1972	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION

1973	RED PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1973	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1973	SCOTS PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1973	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1973	NORWAY SPRUCE	PEI FORESTRY SERVICE	FOUNES HEAD, NEW BRUNSWICK?

1974	EASTERN LARCH	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1974	NORWAY SPRUCE	PEI FORESTRY SERVICE	FOUNES HEAD, NEW BRUNSWICK?
1974	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1974	AUSTRIAN PINE	PEI FORESTRY SERVICE	UNKNOWN
1974	RED PINE	PEI FORESTRY SERVICE	NEW YORK OR PEI
1974	BLACK SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1974	WHITE PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?

1975	BLACK SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1975	RED PINE	PEI FORESTRY SERVICE	NEW YORK OR PEI
1975	SCOTS PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1975	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1975	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1975	EASTERN LARCH	PEI FORESTRY SERVICE	PEI BULK COLLECTION

1976	BLACK SPRUCE	PEI FORESTRY SERVICE	ONTARIO IMPROVED SEED?
1976	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI OR ONTARIO OR MANITOBA
1976	NORWAY SPRUCE	PEI FORESTRY SERVICE	FOUNES HEAD, NEW BRUNSWICK?
1976	WHITE PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1976	SCOTS PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1976	CEDAR	PEI FORESTRY SERVICE	PEI BULK COLLECTION

1977	NORWAY SPRUCE	PEI FORESTRY SERVICE	FOUNES HEAD, NEW BRUNSWICK?
1977	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI OR ONTARIO OR QUEBEC
1977	EASTERN LARCH	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1977	RED SPRUCE	PEI FORESTRY SERVICE	PEI PLUSTREE OPEN POLLINATED COLLECTIONS
1977	YELLOW BIRCH	PEI FORESTRY SERVICE	PEI PLUSTREE OPEN POLLINATED COLLECTIONS

1978	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1978	BLACK SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1978	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1978	EASTERN LARCH	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1978	SCOTS PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION?
1978	YELLOW BIRCH	PEI FORESTRY SERVICE	PEI PLUSTREE OPEN POLLINATED COLLECTIONS

1979	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1979	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1979	NORWAY SPRUCE	PEI FORESTRY SERVICE	FOUNES HEAD, NEW BRUNSWICK?
1979	BLACK SPRUCE	PEI FORESTRY SERVICE	FARMINGTON, CAMPBELLS COVE, LARKINS POND, PEI
1979	EASTERN LARCH	PEI FORESTRY SERVICE	PEI BULK COLLECTION

1980	BLACK SPRUCE	PEI FORESTRY SERVICE	FARMINGTON, CAMPBELLS COVE, LARKINS POND, PEI OR PORTAGE RIVER, NEW BRUNSWICK
1980	JACK PINE	PEI FORESTRY SERVICE	PORTAGE RIVER, NEW BRUNSWICK
1980	EUR/JAP LARCH	PEI FORESTRY SERVICE	CANADIAN FORESTRY SERVICE, FREDERICTON, NEW BRUNSWICK
1980	BUTTERNUT	PEI FORESTRY SERVICE	RAVENSWOOD, CHARLOTTETOWN, PEI
1980	YELLOW BIRCH	PEI FORESTRY SERVICE	SELECTED STANDS, PEI
1980	HYBRID POPLAR	PEI FORESTRY SERVICE	O.M.N.R., MAPLE, ONTARIO

1981	BLACK SPRUCE	PEI FORESTRY SERVICE	FARMINGTON, CAMPBELLS COVE, LARKINS POND, PEI
1981	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1981	JACK PINE	PEI FORESTRY SERVICE	PORTAGE RIVER, NEW BRUNSWICK
1981	EUR/JAP LARCH	PEI FORESTRY SERVICE	DANISH STATE FORESTRY, TREE IMPROVEMENT STATION, HUMBLEBACK, DENMARK
1981	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1981	HYBRID POPLAR	PEI FORESTRY SERVICE	O.M.N.R., MAPLE, ONTARIO

1982	BLACK SPRUCE	PEI FORESTRY SERVICE	FARMINGTON, CAMPBELLS COVE, LARKINS POND, PEI
1982	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1982	JACK PINE	PEI FORESTRY SERVICE	PORTAGE RIVER, NEW BRUNSWICK
1982	RED PINE	PEI FORESTRY SERVICE	PEI BULK COLLECTION OR IRON MOUNTAIN, MICHIGAN USA?
1982	AUSTRIAN PINE	PEI FORESTRY SERVICE	VICTORIA PARK, CHARLOTTETOWN, PEI??
1982	EASTERN LARCH	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1982	EUR/JAP LARCH	PEI FORESTRY SERVICE	DANISH STATE FORESTRY, TREE IMPROVEMENT STATION, HUMBLEBACK, DENMARK
1982	CEDAR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1982	HYBRID POPLAR	PEI FORESTRY SERVICE	O.M.N.R., MAPLE, ONTARIO

1983	WHITE SPRUCE	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1983	JACK PINE	PEI FORESTRY SERVICE	PORTAGE RIVER, NEW BRUNSWICK
1983	RED PINE	PEI FORESTRY SERVICE	IRON MOUNTAIN, MICHIGAN, USA?
1983	BALSAM FIR	PEI FORESTRY SERVICE	PEI BULK COLLECTION
1983	HYBRID POPLAR	PEI FORESTRY SERVICE	O.M.N.R., MAPLE, ONTARIO

Note; All of the following crops were produced by the P.E.I. Forestry Service at the Upton Road Nursery. The crop numbers are those used by the nursery and are recorded for all plantations established after 1983.

Year	Crop #	Species	Seed source
1983	8306	BLACK SPRUCE	FARMINGTON, PEI
1983	8307	EASTERN LARCH	PEI BULK COLLECTION

1984	8401	WHITE SPRUCE	PEI BULK COLLECTION
1984	8402	WHITE SPRUCE	PEI BULK COLLECTION
1984	8403	WHITE SPRUCE	PEI BULK COLLECTION
1984	8405	BLACK SPRUCE	CAMPBELLS COVE, LARKINS POND, PEI
1984	8406	BALSAM FIR	PEI BULK COLLECTION
1984	8408	AUSTRIAN PINE	VICTORIA PARK, CHARLOTTETOWN, PEI
1984	8409	HYBRID POPLAR	O.M.N.R., MAPLE, ONTARIO

1985	8502	RED PINE	IRON MOUNTAIN, MICHIGAN?, USA
1985	8504	AUSTRIAN PINE	VICTORIA PARK, CHARLOTTETOWN, PEI
1985	8505	WHITE SPRUCE	PEI BULK COLLECTION
1985	8506	BLACK SPRUCE	PEI BULK COLLECTION
1985	8507	EASTERN LARCH	PEI BULK COLLECTION
1985	8510	BALSAM FIR	PEI BULK COLLECTION
1985	8511	BALSAM FIR	PEI BULK COLLECTION
1985	8512	HYBRID POPLAR	O.M.N.R., MAPLE, ONTARIO

1986	8602	RED PINE	CASE LAKE, MINNESOTA, USA
1986	8604	AUSTRIAN PINE	VICTORIA PARK, CHARLOTTETOWN, PEI
1986	8605	WHITE SPRUCE	PEI BULK COLLECTION
1986	8606	BLACK SPRUCE	PEI BULK COLLECTION
1986	8607	EASTERN LARCH	PEI BULK COLLECTION
1986	8610	BALSAM FIR	PEI BULK COLLECTION
1986	8611	HYBRID POPLAR	O.M.N.R., MAPLE, ONTARIO

1987	8702	RED PINE	ONTARIO & IRON MOUNTAIN, MINNESOTA
1987	8704	AUSTRIAN PINE	VICTORIA PARK, CHARLOTTETOWN, PEI
1987	8705	WHITE SPRUCE	PEI BULK COLLECTION
1987	8706	BLACK SPRUCE	FARMINGTON, CAMPBELLS COVE, LARKINS POND, PEI
1987	8707	EASTERN LARCH	PEI BULK COLLECTION
1987	8710	BALSAM FIR	PEI BULK COLLECTION
1987	8711	WHITE PINE	BRUDENELL PARK, POINT PLEASANT, PEI & NOVA SCOTIA BULK
1987	8712	HYBRID POPLAR	O.M.N.R., MAPLE, ONTARIO

1988	8802	RED PINE	CAMP TAMAWABY, IONA, ST PETERS, RIVERDALE, PEI
1988	8804	AUSTRIAN PINE	VICTORIA PARK, AUGUSTINE COVE, MONTICELLO, BRACKLEY, HAMPTON, PEI
1988	8805	WHITE SPRUCE	PEI BULK COLLECTION
1988	8806	BLACK SPRUCE	FARMINGTON, CAMPBELLS COVE, LARKINS POND, PEI
1988	8807	EASTERN LARCH	PEI BULK COLLECTION
1988	8810	BALSAM FIR	PEI BULK COLLECTION
1988	8811	WHITE PINE	BRUDENELL PARK, POINT PLEASANT, PEI
1988	8812	HYBRID POPLAR	O.M.N.R., MAPLE, ONTARIO
1988	886B	BLACK SPRUCE	FARMINGTON, CAMPBELLS COVE, LARKINS POND, PEI

1989	8904	AUSTRIAN PINE	VICTORIA PARK, AUGUSTINE COVE, MONTICELLO, BRACKLEY, HAMPTON, PEI
1989	8905	WHITE SPRUCE	PEI BULK COLLECTION
1989	8906	BLACK SPRUCE	FARMINGTON, CAMPBELLS COVE, LARKINS POND, PEI
1989	8907	EASTERN LARCH	PEI BULK COLLECTION
1989	8910	BALSAM FIR	PEI BULK COLLECTION
1989	8911	WHITE PINE	BRUDENELL PARK, POINT PLEASANT, FLAT RIVER, PEI
1989	8912	BALSAM FIR	PEI BULK COLLECTION

1990 9002	RED PINE	CAMP TAMAWABY, IONA, ST PETERS, RIVERDALE, PEI
1990 9004	AUSTRIAN PINE	VICTORIA PARK, AUGUSTINE COVE, MONTICELLO, BRACKLEY, HAMPTON, PEI
1990 9005	WHITE SPRUCE	PEI BULK COLLECTION
1990 9006	BLACK SPRUCE	FARMINGTON, CAMPBELLS COVE, LARKINS POND, PEI
1990 9007	EASTERN LARCH	PEI BULK COLLECTION
1990 9007	EASTERN LARCH	PEI BULK COLLECTION
1990 9010	BALSAM FIR	CAMP TAMAWABY, AFTON ROAD, PEI
1990 9011	WHITE PINE	BRUDENELL PARK, POINT PLEASANT, FLAT RIVER, PEI
1990 9012	BALSAM FIR	CAMP TAMAWABY, AFTON ROAD, PEI

1991 9102	RED PINE	NEW BRUNSWICK & PEI
1991 9104	AUSTRIAN PINE	VICTORIA PARK, AUGUSTINE COVE, MONTICELLO, BRACKLEY, HAMPTON, PEI
1991 9105	WHITE SPRUCE	RIVERDALE, ST PATRICKS ROAD, FAMILY TESTS, PEI
1991 9106	BLACK SPRUCE	48 ROAD ORCHARD, PEI
1991 9106	BLACK SPRUCE	48 ROAD ORCHARD, PEI
1991 9107	EASTERN LARCH	CAMP TAMAWABY, PEI
1991 9110	BALSAM FIR	CAMP TAMAWABY, AFTON ROAD, PEI
1991 9111	WHITE PINE	BRUDENELL PARK, POINT PLEASANT, FLAT RIVER, PEI
1991 9112	BALSAM FIR	CAMP TAMAWABY, AFTON ROAD, PEI

1992 9202	RED PINE	CAMP TAMAWABY, IONA, ST PETERS, RIVERDALE, PEI
1992 9204	AUSTRIAN PINE	VICTORIA PARK, AUGUSTINE COVE, MONTICELLO, BRACKLEY, HAMPTON, PEI
1992 9205	WHITE SPRUCE	RIVERDALE, ST PATRICKS ROAD, FAMILY TESTS, PEI
1992 9206	BLACK SPRUCE	48 ROAD ORCHARD, PEI
1992 9207	EASTERN LARCH	CAMP TAMAWABY, PEI
1992 9207	EASTERN LARCH	CAMP TAMAWABY, PEI
1992 9210	BALSAM FIR	CAMP TAMAWABY, AFTON ROAD, PEI
1992 9211	WHITE PINE	DEERSDALE, STONEY BROOK, N. B. & SHELBURNE NOVA SCOTIA
1992 9212	BALSAM FIR	CAMP TAMAWABY, AFTON ROAD, PEI
1992 9213	YELLOW BIRCH	PEI BULK COLLECTION
1992 9214	RED OAK	PEI BULK COLLECTION

1993 9301	RED PINE	CAMP TAMAWABY, IONA, ST PETERS, RIVERDALE, PEI
1993 9302	WHITE PINE	NORTH CAINS, DEERSDALE, NEW BRUNSWICK
1993 9303	AUSTRIAN PINE	VICTORIA PARK, AUGUSTINE COVE, MONTICELLO, BRACKLEY, HAMPTON, PEI
1993 9304	RED SPRUCE	ABRAHAMS LAKE, NOVA SCOTIA
1993 9305	WHITE SPRUCE	RIVERDALE, ST PATRICKS ROAD, FAMILY TESTS, PEI
1993 9306	BLACK SPRUCE	48 ROAD ORCHARD, PEI
1993 9307	NORWAY SPRUCE	ALLEN PLANTATION, BINGHAM, MAINE
1993 9308	EASTERN LARCH	CAMP TAMAWABY, PEI
1993 9309	JAPANESE LARCH	HOKKAI, JAPAN
1993 9310	BALSAM FIR	CAMP TAMAWABY, AFTON ROAD, PEI
1993 9311	EAST. HEMLOCK	LYNDALE, PEI
1993 9312	BALSAM FIR	CAMP TAMAWABY, AFTON ROAD, PEI
1993 9315	YELLOW BIRCH	VALLEYFIELD, PEI
1993 9316	WHITE BIRCH	GRANDVIEW, PEI
1993 9317	WHITE ASH	HALIBURTON, RICHMOND, NORTHAM, PEI
1993 9319	RED OAK	PEI BULK COLLECTION

1994 9401	RED PINE	CAMP TAMAWABY, IONA, ST PETERS, RIVERDALE, PEI
1994 9402	WHITE PINE	CHIPMAN, NEW BRUNSWICK
1994 9403	AUSTRIAN PINE	VICTORIA PARK, AUGUSTINE COVE, MONTICELLO, BRACKLEY, HAMPTON, PEI
1994 9404	RED SPRUCE	ABRAHAMS LAKE, NOVA SCOTIA
1994 9405	WHITE SPRUCE	RIVERDALE, ST PATRICKS ROAD, FAMILY TESTS, PEI
1994 9406	BLACK SPRUCE	48 ROAD ORCHARD, PEI
1994 9407	NORWAY SPRUCE	ALLEN PLANTATION, BINGHAM, MAINE
1994 9410	BALSAM FIR	CAMP TAMAWABY, AFTON ROAD, PEI
1994 9411	EAST. HEMLOCK	LYNDALE, PEI

1994	9412	BALSAM FIR	CAMP TAMAWABY, AFTON ROAD, PEI
1994	9413	CEDAR	PEI BULK COLLECTION
1994	9415	YELLOW BIRCH	VALLEYFIELD, PEI
1994	9416	WHITE BIRCH	GRANDVIEW, PEI
1994	9417	WHITE ASH	KENTVILLE, NOVA SCOTIA
1994	9419	RED OAK	KENTVILLE, NOVA SCOTIA
1994	9420	SUGAR MAPLE	PEI BULK COLLECTION

1995	9501	RED PINE	CAMP TAMAWABY, IONA, ST PETERS, RIVERDALE, PEI
1995	9502	WHITE PINE	SHELBURNE, N.S.
1995	9503	AUSTRIAN PINE	VICTORIA PARK, PEI
1995	9504	RED SPRUCE	ABRAHAMS LAKE, NOVA SCOTIA
1995	9505	WHITE SPRUCE	RIVERDALE, ST PATRICKS ROAD, FAMILY TESTS, PEI
1995	9506	BLACK SPRUCE	48 ROAD ORCHARD, PEI
1995	9507	NORWAY SPRUCE	ALLEN PLANTATION, BINGHAM, MAINE
1995	9508	EASTERN LARCH	PEI BULK
1995	9509	JAPANESE LARCH	HOKKALDO PROV., JAPAN
1995	9510	BALSAM FIR	CAMP TAMAWABY, AFTON ROAD, PEI
1995	9511	EAST. HEMLOCK	NOVA SCOTIA
1995	9513	CEDAR	CAMP TAMAWABY, PEI
1995	9515	YELLOW BIRCH	VALLEYFIELD, PEI
1995	9516	WHITE BIRCH	GRANDVIEW, PEI
1995	9517	WHITE ASH	WHITENBURG, N.S. 1994
1995	9519	RED OAK	SHELBURNE, N.S.

1996	9601	RED PINE	ESTCAMBA, MICHIGAN, USA
1996	9602	WHITE PINE	SHELBURNE, N.S.
1996	9603	AUSTRIAN PINE	VICTORIA PARK, PEI
1996	9604	RED SPRUCE	ABRAHAMS LAKE, NOVA SCOTIA
1996	9605	WHITE SPRUCE	RIVERDALE, ST PATRICKS ROAD, FAMILY TESTS, PEI
1996	9606	BLACK SPRUCE	48 ROAD ORCHARD, PEI
1996	9607	NORWAY SPRUCE	CAMP TAMAWABY, PEI
1996	9608	EASTERN LARCH	UPTON ROAD ORCHARD, PEI
1996	9608a	EASTERN LARCH	BULK, PEI
1996	9609	JAPANESE LARCH	HOKKALDO PROV., JAPAN
1996	9610	BALSAM FIR	BULK, PEI
1996	9611	EAST. HEMLOCK	LAKE TOMAHAWK, NOVA SCOTIA
1996	9612	BALSAM FIR	BULK, PEI
1996	9613	CEDAR	CAMP TAMAWABY, PEI
1996	9615	YELLOW BIRCH	BULK, PEI
1996	9616	WHITE BIRCH	MERMAID, PEI
1996	9619	RED OAK	SHELBURNE, N.S.
1996	9619a	RED OAK	BULK, PEI
1996	96-23	BLUE SPRUCE	KAIBAD, AZ, USA

1997	9701	RED PINE	BULK, PEI
1997	9702	WHITE PINE	SHELBURNE, N.S.
1997	9703	AUSTRIAN PINE	VICTORIA PARK, PEI/ SLOV. YUGOSLAVIA
1997	9704	RED SPRUCE	ABRAMS LAKE, N.S.
1997	9705	WHITE SPRUCE	RIVERDALE, ST PATRICKS ROAD, FAMILY TESTS, PEI
1997	9706	BLACK SPRUCE	48 ROAD ORCHARD, PEI
1997	9707	NORWAY SPRUCE	CAMP TAMAWABY, PEI
1997	9708	EASTERN LARCH	DOVER ORCHARD, PEI
1997	9709	JAPANESE LARCH	PENOBSCOT, I.P. ORCHARD
1997	9710	BALSAM FIR	BULK, PEI
1997	9711	EAST. HEMLOCK	LAKE TOMAHAWK, NOVA SCOTIA
1997	9712	BALSAM FIR	BULK, PEI
1997	9713	CEDAR	CAMP TAMAWABY, PEI
1997	9714	SCOTS PINE	MINTO, N.B.
1997	9715	YELLOW BIRCH	BULK, PEI

1997	9716	WHITE BIRCH	MERMAID, PEI
1997	9717	WHITE ASH	RICMOND, PEI
1997	9719	RED OAK	ROYALTY OAKS, PEI
1997	9719a	RED OAK	ROYALTY OAKS, PEI
1997	9723	BLUE SPRUCE	KAIBAD, AZ, USA

1998	9801	RED PINE	BULK, PEI
1998	9802	WHITE PINE	DEBERT SEED ORCHARD, N.S.
1998	9803	AUSTRIAN PINE	VICTORIA PARK, PEI
1998	9804	RED SPRUCE	BOWATER'S SEED ORCHARD, N.S.
1998	9805	WHITE SPRUCE	DOVER SEED ORCHARD, PEI
1998	9806	BLACK SPRUCE	48 ROAD ORCHARD, PEI
1998	9807	NORWAY SPRUCE	CAMP TAMAWABY, PEI
1998	9808	EASTERN LARCH	DOVER ORCHARD, PEI
1998	9809	JAPANESE LARCH	PENOBSCOT, I.P. ORCHARD
1998	9810	BALSAM FIR	BULK, PEI
1998	9811	EAST. HEMLOCK	LAKE TOMAHAWK, NOVA SCOTIA
1998	9812	BALSAM FIR	BULK, PEI
1998	9813	CEDAR	CAMP TAMAWABY, PEI
1998	9814	SCOTS PINE	MINTO, N.B.
1998	9815	YELLOW BIRCH	BULK, PEI
1998	9817	WHITE ASH	RICMOND, PEI
1998	9819	RED OAK	ROYALTY OAKS, PEI
1998	98-23	BLUE SPRUCE	KAIBAD, AZ, USA

Discussion

The following is a brief discussion on what seed sources should be used in future plantings in Prince Edward Island.

Pine

Red pine (*Pinus resinosa* Ait.)- Park & Fowler (1981) concluded that the source of seed used for this species is not particularly important due to its genetic uniformity. The main consideration when acquiring seed of this species is the cost.

White pine (*Pinus strobus* L.)- Fowler (pers. comm. 1987) recommends the use of seed from the Maritime provinces (excluding northern New Brunswick) and the State of Maine for producing seedlings in P.E.I. The early importations from New York and Ontario were probably not appropriate, due to differences in photoperiod and resulting potential slower growth.

Austrian/Scots pine (*Pinus nigra* var *nigra* L./*P. sylvestris* L.)- Confusion between these two species has been a problem since the mid 1950s and up until local collections were made. (Plantations that were recorded as being Austrian Pine are in actuality Scots.) The Scots pine seed source appears to have very poor form and has been subject to a number of disease and insect problems, as well as snow breakage due to branch form. No Scots pine has been planted since 1978, except for a Tree Improvement provenance test established in 1992. The current Austrian pine seed sources are very suited to the ornamental and shelterbelt purposes for which the species is planted.

Lodgepole pine (*Pinus contorta* Dougl.)- The 1954 importation from Nova Scotia was established at Goose River and has grown reasonably well. It has however been subject to sweet fern blister rust (*Cronartium comptoniae* Arth.) which has greatly reduced the lower stem quality. Due to the wide spread occurrence of sweet fern, further importations are not recommended.

Jack pine (*Pinus banksiana* Lamb.)- Plantations established in the early 1980s have grown well but stem form is variable. If jack pine is to be planted in future, improved seed should be obtained from the New Brunswick Tree Improvement Council.

Fir

Balsam fir (*Abies balsamea* (L.)Mill)- All plantings of this species have used local sources and have done well. Collections were usually from single trees felled for seed collection. Local collections from selected stands and trees should continue. Christmas tree plantations should also use this same source until seed is available from the seed orchard now established at Dover, Kings County.

Douglas fir (*Pseudotsuga menziesii* (Mirb.)Franco)- The origin of the seed used over the period is unknown although the supplier is known. Unfortunately the supplier, Herbst Brothers of New York, have no surviving records. Another unconfirmed source is of a small importation of seed direct from British Columbia in the 1970s (pers. comm. D. McAskill 1994). It is probable that the Douglas fir planted in P.E.I. is of inland not coastal origin but this is speculation. The remains of the

provenance trial at Jacks Road, Queens County may provide some useful guidance should this species be planted in the future.

Larch

Eastern larch (*Larix laricina* (DuRoi)K. Koch)- Seed used appears to have all been local collections from selected trees. This practice should continue until the Tree Improvement orchards produce sufficient seed to produce a nursery crop.

European larch (*Larix decidua* L.)- The origin of the seed supplied by Herbst Brothers in the 1950s and 1960s is unknown. Seed imported from Denmark in 1980 was from selected seed stands or orchards and should be an excellent source. The plantations grown from this source have grown well but many exhibit degrees of hybridization between European and Japanese larch. Provenance and larch species studies conducted by the Canadian Forestry Service recommend seed used in the future should come from the Sudeten Mountains of central Europe, or from tree improvement programs (Loo-Dinkins et al, 1992, Glen 1992).

Japanese/Hybrid larch (*Larix leptolepis* L./ *L. eurolepis*) - Plantations established using the 1980 imported seed from Denmark have grown well and are of good form. The current source is a proven one direct from Japan and should continue to be used (Park & Fowler, 1983).

Spruce

White spruce (*Picea glauca* (Moench)Voss)- Almost all seed used has been from local collections. Unfortunately some of these collections were from hedgerow trees and the form now present in the 1950 plantations reflect this. Since 1991 seed has come from collections in the 1976 family tests established by the Tree Improvement Section. This should continue until the clonal seed orchards produce enough seed which is expected by 1996.

Black spruce (*Picea mariana* (Mill.)B.S.P.)- Very little black spruce was planted prior to 1980 and most was from local sources. The plantations resulting from these early collections show characteristics of hybridization between red and black spruce. Since 1991 seed used has come from the seed orchard at 48 Road, Kings County which is composed primarily of New Brunswick sources which have proven themselves as hardy and exhibiting good form and growth in the Maritimes (Fowler & Park, 1982).

Red spruce (*Picea rubens* Sarg.)- Seed used to produce the very small amount that was planted came primarily from local collections. The plantations resulting from these early collections show characteristics or hybridization between red and black spruce. In 1977 and 1978 a number of plantations were established using seedlings grown from collections of open pollinated seed from plus trees in the Province. These plantations were considered operational although detailed maps were made showing the location of each seedlot.

Fowler et al (1988) recommend that seed should come from the Annapolis Valley area of Nova Scotia until improved seed is available.

Norway spruce (*Picea abies* (L.)Karst.)- From the limited records it appears that all the Norway spruce planted in P.E.I. is from plantations of German origin, which has not done as well as Polish sources in provenance tests (Fowler, 1979). Seed used in future should come from sources in Maine or the Maritimes that have exhibited good growth and form, or use importations direct from Poland (Glen, 1994)

Cedar

Cedar (*Thuja occidentalis* L.)- Little of this species has been planted and usually has been as a hedge. The only seed used has been collected locally and no change in this practice is needed.

Hardwoods

With the exception of the ash planted in the early 1960s all the seed used for hardwood production has been from local collections. The exception is the ash seed acquired from Herbst Brothers of New York. This material was believed to be white ash (*Fraxinus americana* L.) but recent examination of the plantations lead the author to believe that it is probably green ash (*F. pennsylvanica* Marsh.). These 1960 plantations have not grown as well as expected and future planting should not use these plantations as a seed source. The seed used in the future should come from selected stands of white ash in P.E.I. or the Maritimes.

Yellow and white birch, red oak, and butternut planted prior to 1994 have been from selected stands or as in the case of yellow birch in 1977/8 from plus trees. Seed used in the future should come from trees or stands exhibiting good form and growth in P.E.I. or the Maritimes.

General Comments on Seed Sources and Collections

The importance of seed origin was recognized in 1972 as the seed collected by the P.E.I. Forestry Service that year was noted in the 1972 Annual Report as being from 'the straightest and best quality trees' to be found. Examination of white spruce plantations established in the late 1950s lead the author to believe that this was previously not always the case.

It was also noted in 1971 that future seed acquisitions would only be from companies or sources that offered seed from 'plus' (superior) trees, implying that seed was not always from the best sources. Confusion in the species of pine seed acquired in the 1950s and 1960s and the stem quality of Scots pine tends to confirm this opinion.

In August 1973 and 1974 advertisements were placed in the Guardian newspaper informing the public that the Forestry Service would purchase balsam fir cones. According to the Annual Report the 1973 purchase yielded 59 kgs of seed. The quality of trees from which the seed was collected was not controlled. Therefore the quality of the seed was questionable whether the seed was to be used for Christmas tree or timber production.

WANTED

The Forestry Branch, Department of Agricultural Forestry, will purchase.

**BALSAM FIR or
VAR CONES**

at Five dollars (\$5) per bushel delivered at Beach Grove Nursery. Hours between 8 a. m. and 4 p.m., Monday to Friday.

These cones will have to be picked within the next two weeks

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Guardian August 23rd 1974 pg 14

In 1976 the Annual Report of the Forestry Service noted problems with 'dubious' quality seed sources for the nursery stock that was then available.

A geneticist, Dr. Steven Manley, joined the Forestry Service in 1973 (initially part time) and under his direction, the 'Elite Tree Seed Program' or Tree Improvement Program was commenced. Gaudet (1979) states that the Forestry Branch felt that the Elite Tree Seed Program should take priority over all the rest of the Branch's programs due to the province's history of forest destruction by fire and over cutting which had resulted in very poor genetic make up of the remaining trees.

After 1977 seed used was obtained from more rigidly controlled sources. With a few changes in priority, the Tree Improvement program started by Dr. Manley began producing improved seed of certain species in sufficient quantities for the nursery in 1988.

The Tree Improvement Program of the Forestry Branch now has clonal orchards of selected material established at Dover, Kings County and Upton Road, Queens County with associated clone banks at Beech Grove, Queens County; Southampton, Kings County and Wellington, Prince County. A black spruce half-sibling orchard was established at 48 Road, Kings County. White and black spruce family tests were established in conjunction with the orchards.

Species	P.E.I. Seed Orchards	
	Location	Establishment Period
Eastern Larch	Upton Road	1984-1990
Eastern Larch	Dover	1987-1990
White spruce	Dover	1987-1990
White pine, PEI sources	Dover	1988-1990
White pine, N.S. sources	Dover	1988-1990
Red spruce	Dover	1990-
Balsam fir, Xmas trees	Dover	1991-1996
Black spruce	48 Road	1980
Black spruce (2 nd generation)	Upton Road	1995-

The Tree Improvement program has also established a number of provenance and species tests of Norway Spruce, European and Japanese Larch, Scots pine, red pine, and pine species. In conjunction with the Canadian Forestry Service provenance and species tests of red spruce, red pine, larch species, spruce species, and black spruce have been established. Information from these tests will result in better seed source choices in the future.

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