

# Northern Superior Uplands

## Section Forest Resources Management Plan



### Preliminary Issues and Assessment Chapter 4: Forest Composition and Structure



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## Composition and Structure of Commercial Forest Types in the Northern Superior Uplands Section

The following series of tables display the current age class distribution of each forest type by subsection. For each subsection, the age class distribution of stands currently under development is also given. After each table, a series of charts displays the data graphically, both for current forest and as a comparison between 2006 and 2014 data for these same forest cover types.

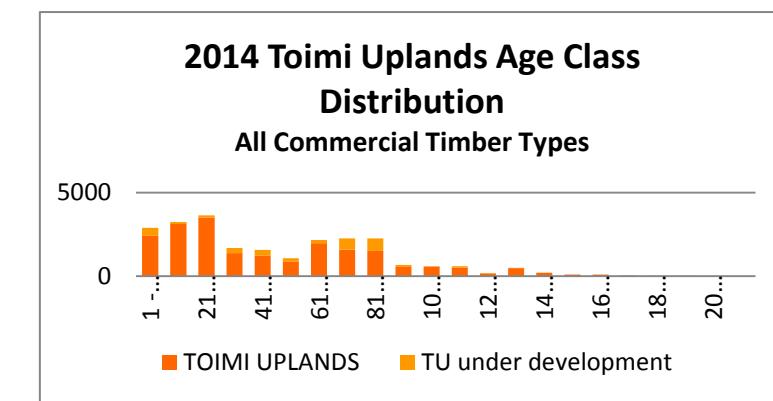
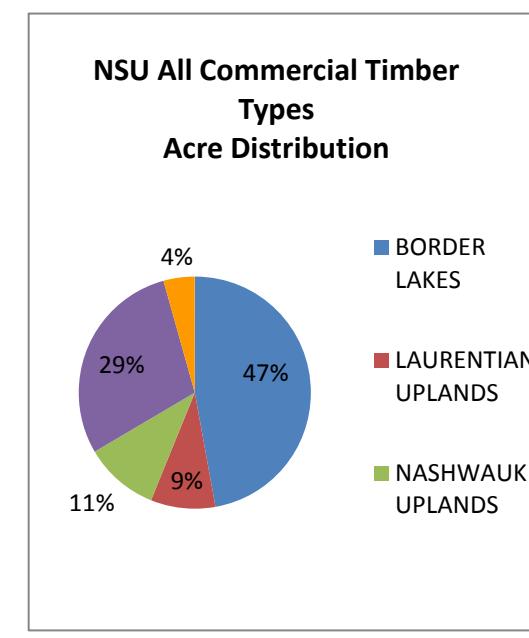
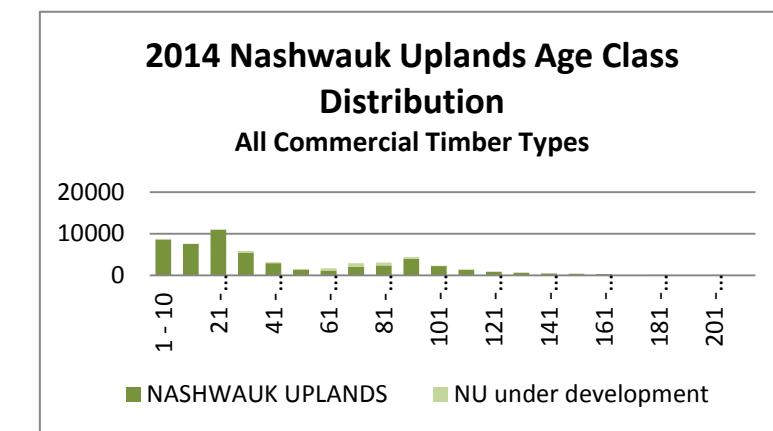
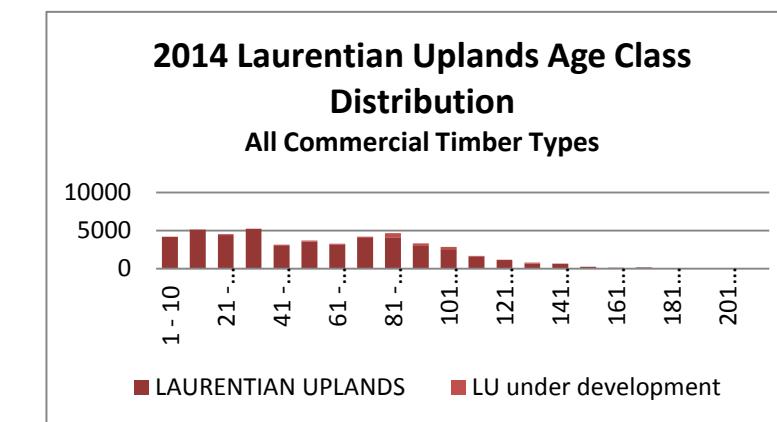
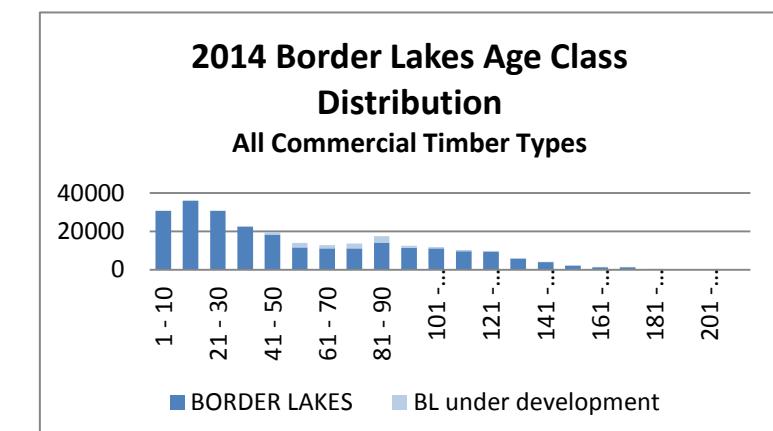
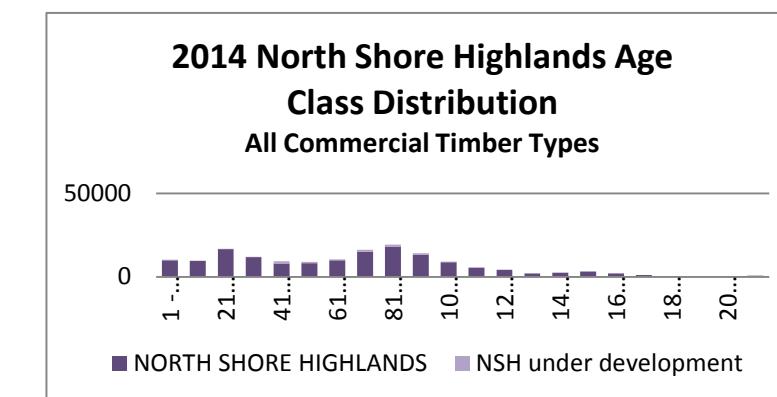
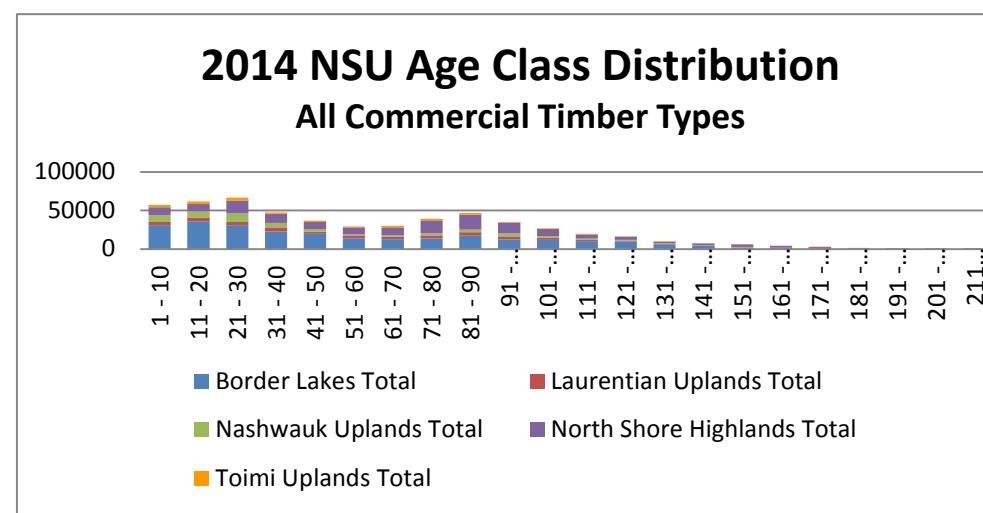
**Table 4.1. 2014 Age-class distribution of all commercial forest types by ten-year age class**

The first column displays the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

All	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	TOTAL
<b>BORDER LAKES</b>	30638	36090	30714	22536	18320	11669	11052	11128	14069	11483	11107	9608	9409	5852	3876	2099	1333	1289	306	262	227	<b>300</b>	<b>243367</b>
BL under development	210	0	166	363	1404	2224	1750	2537	3364	1040	709	646	382	207	39	56	90	43	2	0	0	<b>0</b>	<b>15232</b>
Border Lakes Total	30848	36090	30880	22899	19724	13893	12802	13665	17433	12523	11816	10254	9791	6059	3915	2155	1423	1332	308	262	227	<b>300</b>	<b>258599</b>
<b>LAURENTIAN UPLANDS</b>	4151	5121	4415	5211	3003	3586	3187	4026	4137	2987	2587	1560	1138	669	626	267	140	165	71	67	28	<b>33</b>	<b>47175</b>
LU under development	34	0	114	60	134	132	104	173	546	328	273	115	21	130	15	0	0	0	0	0	0	<b>0</b>	<b>2179</b>
Laurentian Uplands Total	4185	5121	4529	5271	3137	3718	3291	4199	4683	3315	2860	1675	1159	799	641	267	140	165	71	67	28	<b>33</b>	<b>49354</b>
<b>NASHWAUK UPLANDS</b>	8636	7576	10933	5446	2900	1389	1147	1980	2393	3983	2247	1313	803	619	464	319	305	86	77	0	0	<b>42</b>	<b>52658</b>
NU under development	142	64	184	407	270	175	508	932	656	372	56	182	29	85	3	112	0	0	34	13	0	<b>0</b>	<b>4224</b>
Nashwauk Uplands Total	8778	7640	11117	5853	3170	1564	1655	2912	3049	4355	2303	1495	832	704	467	431	305	86	111	13	0	<b>42</b>	<b>56882</b>
<b>NORTH SHORE HIGHLANDS</b>	9885	9636	16595	11845	8052	8340	9908	15156	18120	13414	8881	5531	4219	2046	2417	3352	2021	1231	639	489	165	<b>715</b>	<b>152657</b>
NSH under development	446	5	73	283	1301	629	565	1179	1292	717	399	176	99	18	10	0	0	0	0	0	0	<b>0</b>	<b>7192</b>
North Shore Highlands Total	10331	9641	16668	12128	9353	8969	10473	16335	19412	14131	9280	5707	4318	2064	2427	3352	2021	1231	639	489	165	<b>715</b>	<b>159849</b>
<b>TOIMI UPLANDS</b>	2425	3122	3508	1388	1234	889	1983	1593	1521	562	580	504	158	475	200	95	88	47	28	6	0	<b>0</b>	<b>20406</b>
TU under development	477	119	127	294	342	191	181	678	736	117	9	100	37	27	14	0	0	0	0	0	0	<b>0</b>	<b>3449</b>
Toimi Uplands Total	2902	3241	3635	1682	1576	1080	2164	2271	2257	679	589	604	195	502	214	95	88	47	28	6	0	<b>0</b>	<b>23855</b>
	<b>57044</b>	<b>61733</b>	<b>66829</b>	<b>47833</b>	<b>36960</b>	<b>29224</b>	<b>30385</b>	<b>39382</b>	<b>46834</b>	<b>35003</b>	<b>26848</b>	<b>19735</b>	<b>16295</b>	<b>10128</b>	<b>7664</b>	<b>6300</b>	<b>3977</b>	<b>2861</b>	<b>1157</b>	<b>837</b>	<b>420</b>	<b>1090</b>	<b>548539</b>

### Figure 4.1. 2014 Age-class distribution charts for all commercial cover types

The following seven charts display the 2014 age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the commercial forest is located in each subsection.



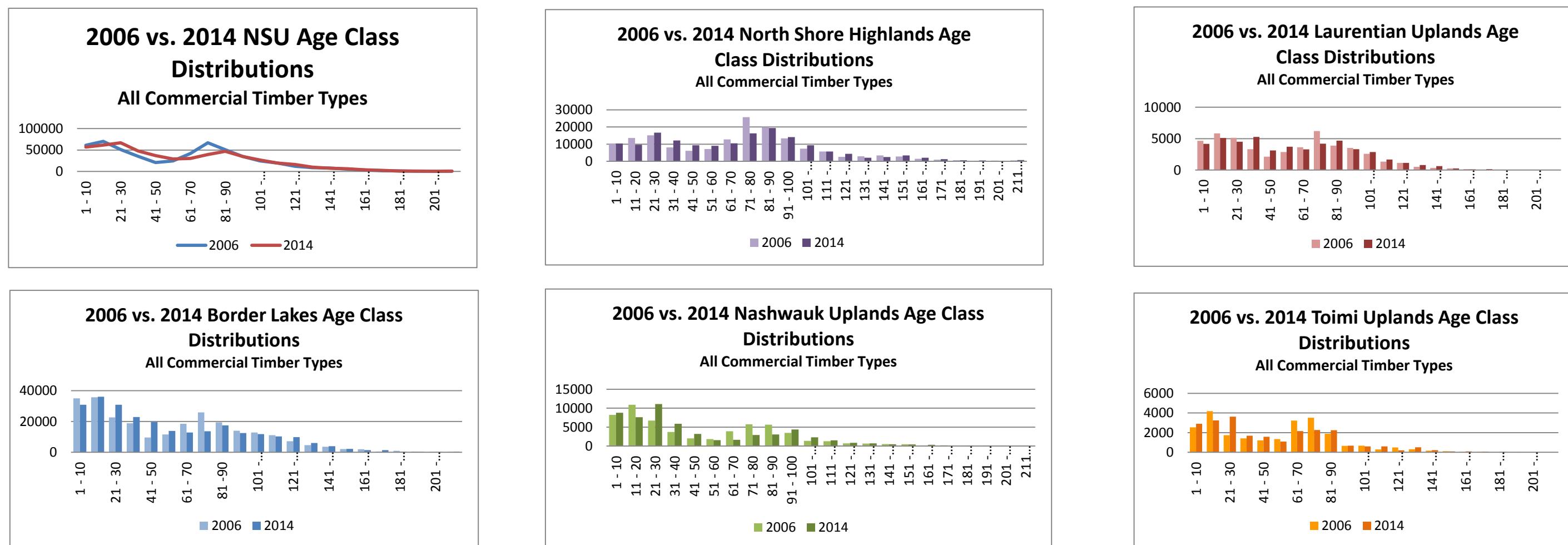
**Table 4.2. 2006 Age-class distribution of all commercial cover types combined, by subsection and ten-year age class**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

All	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 +	Total
BORDER LAKES	35102	35777	22629	18823	9594	11567	18489	25922	19483	13968	12798	11121	7184	4631	3557	2034	1951	495	944	414	231	260	256974
LAURENTIAN UPLANDS	4663	5854	5135	3340	2140	2872	3637	6223	3896	3518	2592	1355	1151	517	347	258	146	75	20	79	3	42	47863
NASHWAUK UPLANDS	8218	10925	6710	3700	1999	1805	3893	5731	5629	3489	1343	1274	685	639	501	437	93	153	28	13	9	30	57304
NORTH SHORE HIGHLANDS	10413	13573	15139	8113	6088	7187	12725	25728	19892	13366	7312	5718	2522	2876	3377	2732	1425	895	582	218	375	459	160715
TOIMI UPLANDS	2546	4191	1741	1416	1215	1340	3227	3517	1889	657	666	294	491	310	165	109	40	40	6	0	0	0	23860
	60942	70320	51354	35392	21036	24771	41971	67121	50789	34998	24711	19762	12033	8973	7947	5570	3655	1658	1580	724	618	791	546716

**Figure 4.2 Comparison between 2006 and current (2014) age-class distributions for all commercial cover types combined**

A line graph displays the age-class distribution of all commercial cover types combined for the section as a whole; five individual bar charts display the age-class distribution of all commercial cover types combined for the individual subsections that make up the NSU.



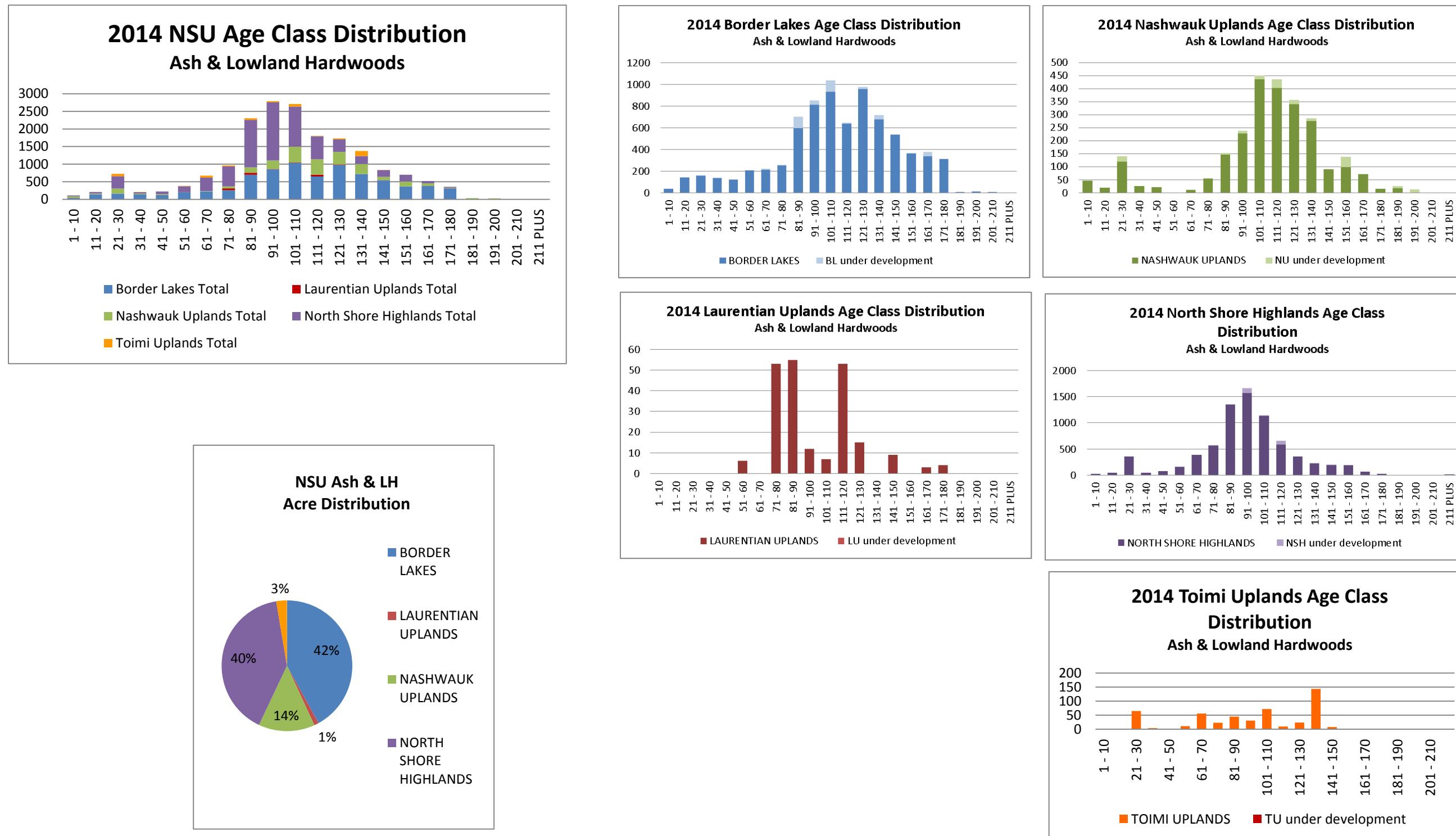
**Table 4.3. 2014 Age-class distribution of ash and lowland hardwoods by ten-year age class**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

Ash & Lowland Hardwoods - 1	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	TOTAL
<b>BORDER LAKES</b>	38	143	159	135	122	207	210	251	597	813	930	637	958	677	538	361	338	311	5	13	8	0	<b>7451</b>
BL under development	0	0	5	0	0	0	12	7	104	38	108	9	17	42	0	5	41	0	0	0	0	0	<b>388</b>
Border Lakes Total	38	143	164	135	122	207	222	258	701	851	1038	646	975	719	538	366	379	311	5	13	8	0	<b>7839</b>
<b>LAURENTIAN UPLANDS</b>	0	0	0	0	0	6	0	53	55	12	7	53	15	0	9	0	3	4	0	0	0	0	<b>217</b>
LU under development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Laurentian Uplands Total	0	0	0	0	0	6	0	53	55	12	7	53	15	0	9	0	3	4	0	0	0	0	<b>217</b>
<b>NASHWAUK UPLANDS</b>	47	19	120	26	22	0	12	55	147	228	437	404	341	275	90	99	71	15	18	0	0	0	<b>2426</b>
NU under development	0	0	21	0	0	0	0	6	10	13	33	16	11	0	40	0	0	9	13	0	0	0	<b>172</b>
Nashwauk Uplands Total	47	19	141	26	22	0	12	55	153	238	450	437	357	286	90	139	71	15	27	13	0	0	<b>2598</b>
<b>NORTH SHORE HIGHLANDS</b>	25	45	353	40	81	156	382	567	1351	1563	1135	581	360	218	186	195	67	26	0	0	0	7	<b>7338</b>
NSH under development	0	0	0	0	0	0	0	6	0	94	7	74	0	6	6	0	0	0	0	0	0	0	<b>193</b>
North Shore Highlands Total	25	45	353	40	81	156	382	573	1351	1657	1142	655	360	224	192	195	67	26	0	0	0	7	<b>7531</b>
<b>TOIMI UPLANDS</b>	0	0	65	4	0	11	56	23	45	31	72	10	24	144	8	0	0	0	0	0	0	0	<b>493</b>
TU under development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Toimi Uplands Total	0	0	65	4	0	11	56	23	45	31	72	10	24	144	8	0	0	0	0	0	0	0	<b>493</b>
	<b>110</b>	<b>207</b>	<b>723</b>	<b>205</b>	<b>225</b>	<b>380</b>	<b>672</b>	<b>962</b>	<b>2305</b>	<b>2789</b>	<b>2709</b>	<b>1801</b>	<b>1731</b>	<b>1373</b>	<b>837</b>	<b>700</b>	<b>520</b>	<b>356</b>	<b>32</b>	<b>26</b>	<b>8</b>	<b>7</b>	<b>18678</b>

**Figure 4.3. 2014 Age-class distribution of ash and lowland hardwood stands**

The following seven charts display the age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the cover type is located in each subsection.



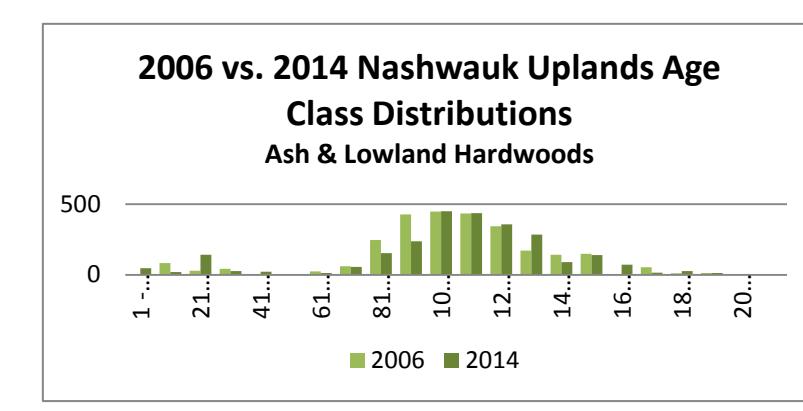
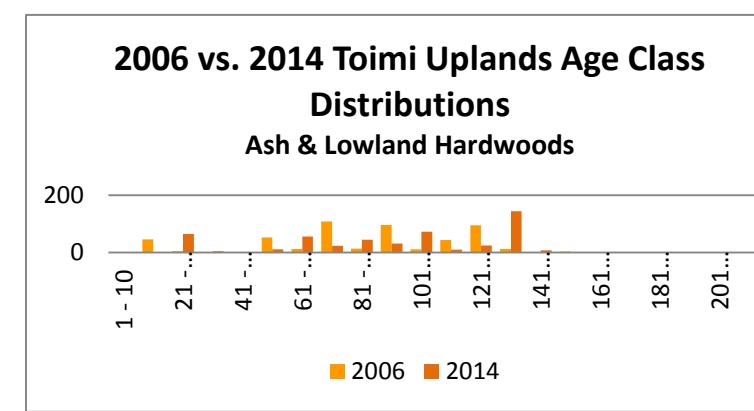
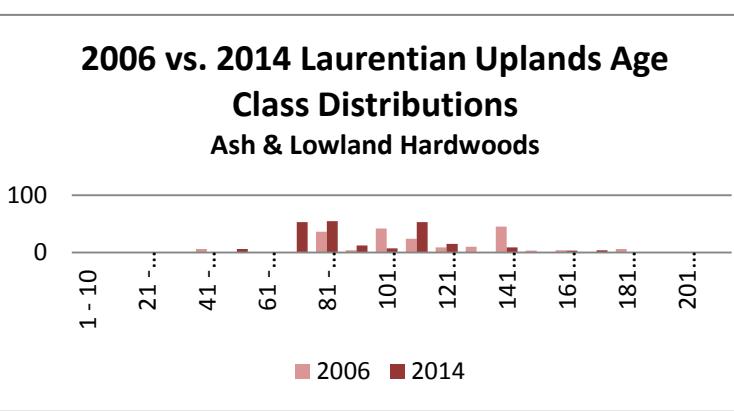
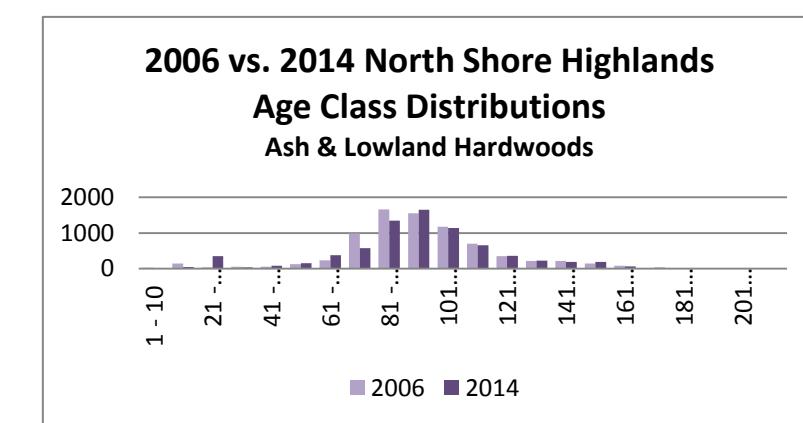
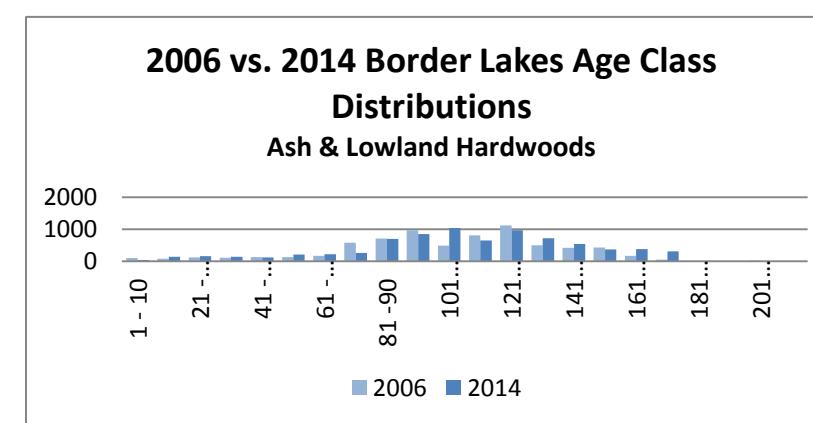
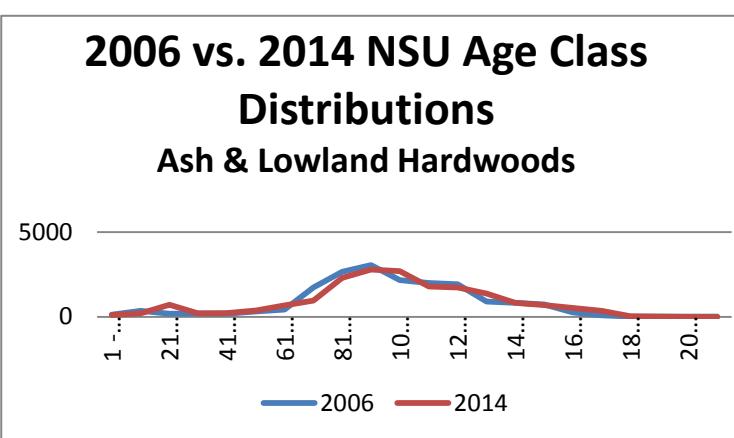
**Table 4.4. 2006 Ash and lowland hardwoods acreage by subsection and ten-year age class**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

Ash & Lowland Hardwoods - 1	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	Total
BORDER LAKES	96	77	123	105	130	125	168	576	710	972	494	806	1123	499	423	431	167	46	9	6	19	4	7109
LAURENTIAN UPLANDS	0	0	0	0	6	0	0	0	36	4	42	24	9	10	45	3	4	0	6	0	0	0	189
NASHWAUK UPLANDS	0	84	28	41	0	4	23	61	246	428	448	434	345	172	142	148	0	53	10	13	0	0	2680
NORTH SHORE HIGHLANDS	33	142	38	54	54	130	236	989	1659	1553	1177	703	351	218.0	215.0	148	84	0	0	0	7	6	7797
TOIMI UPLANDS	0	46	4	0	0	52	12	108	13	96	11	43	95	12.0	0.0	3	0	0	0	0	0	0	495
	129	349	193	200	190	311	439	1734	2664	3053	2172	2010	1923	911	825	733	255	99	25	19	26	10	18270

**Figure 4.4. Comparison between 2006 and current (2014) ash and lowland hardwoods age class distributions**

A line graph displays the age-class distribution of ash and lowland hardwoods cover type for the section as a whole; five individual bar charts display the age-class distribution of the cover type for the individual subsections that make up the NSU.



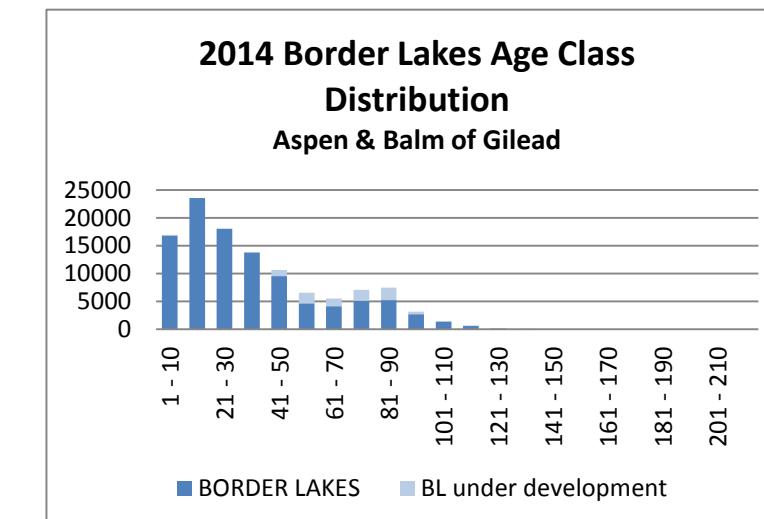
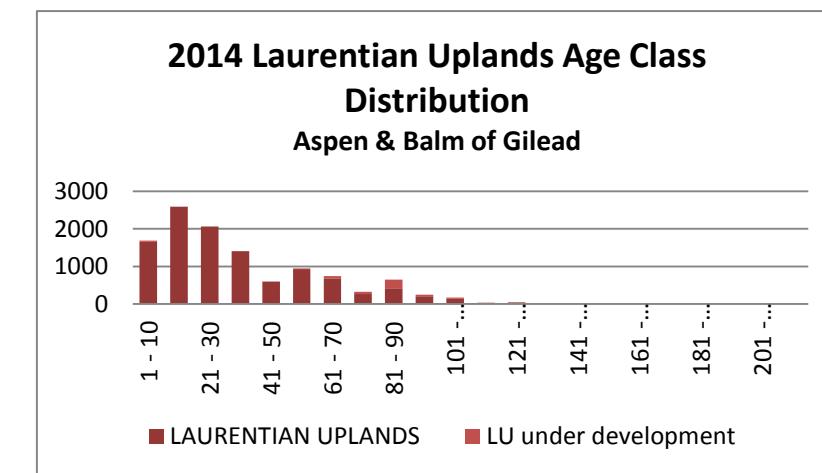
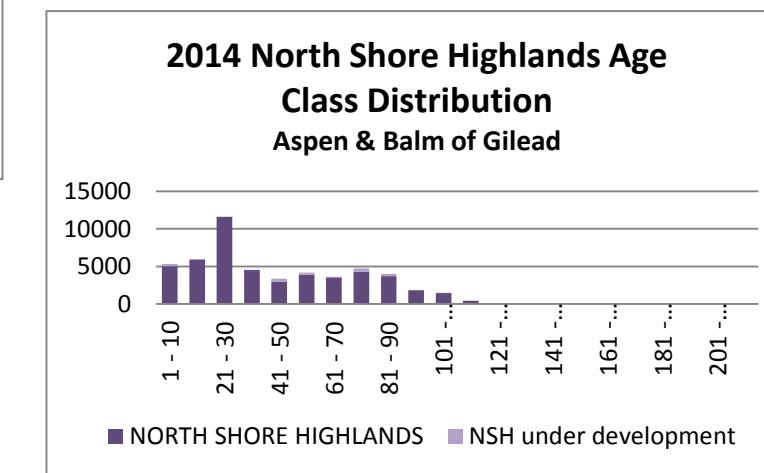
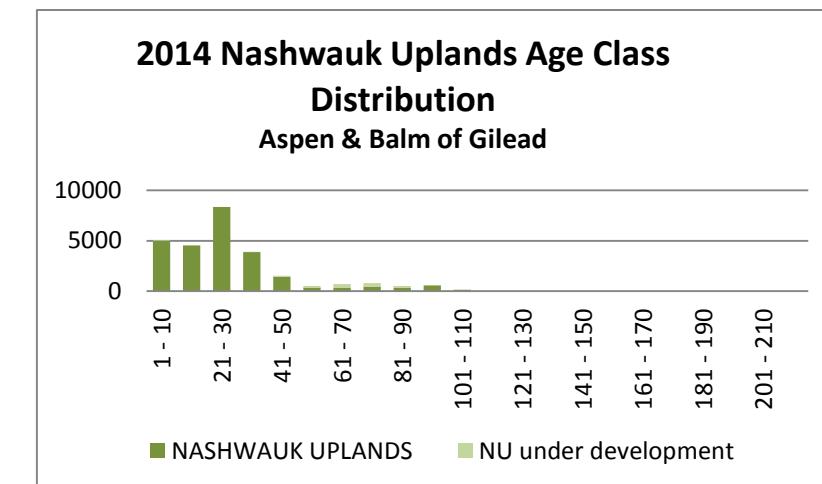
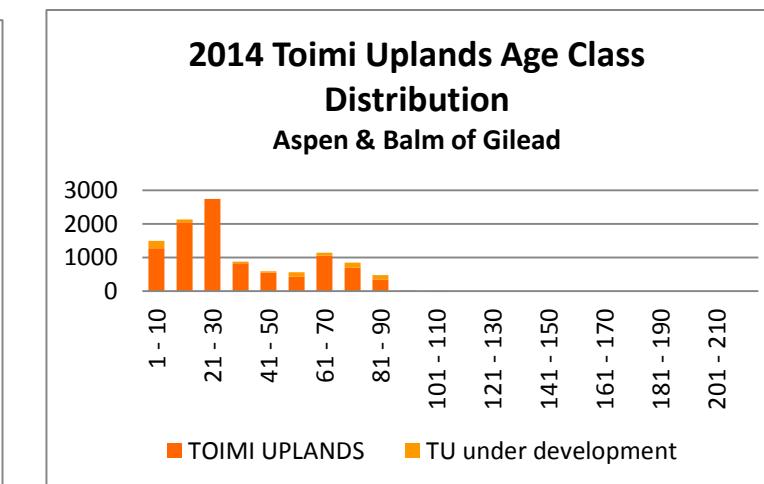
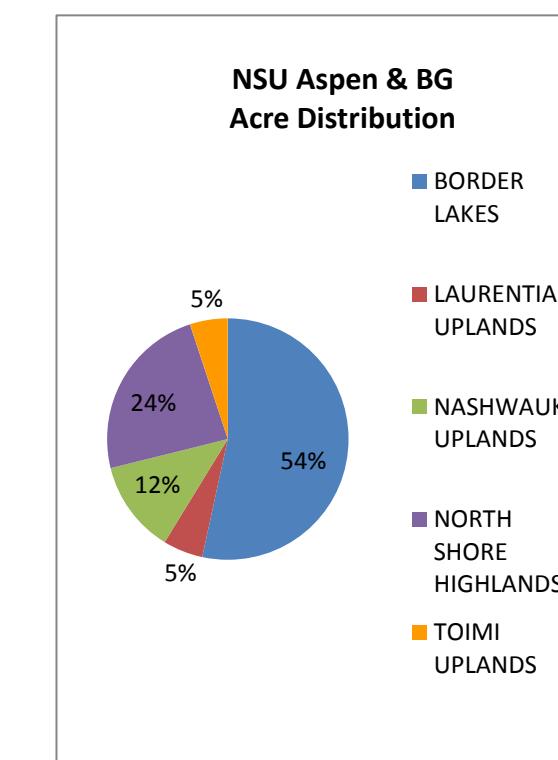
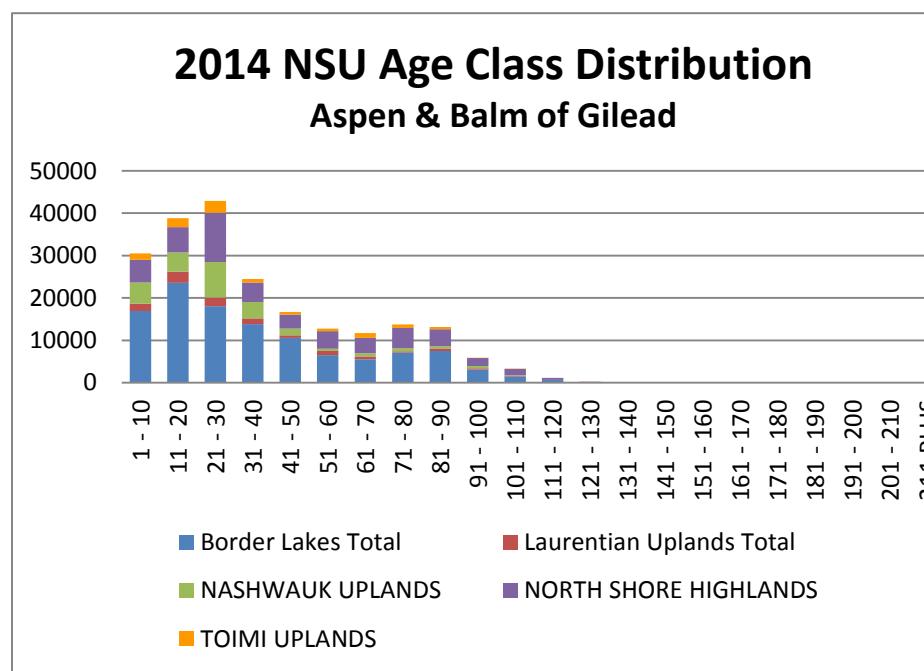
**Table 4.5. 2014 Age-class distribution of aspen and balm of Gilead stands by ten-year age class**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

<b>Aspen &amp; Balm of Gilead - 12</b>	<b>1 - 10</b>	<b>11 - 20</b>	<b>21 - 30</b>	<b>31 - 40</b>	<b>41 - 50</b>	<b>51 - 60</b>	<b>61 - 70</b>	<b>71 - 80</b>	<b>81 - 90</b>	<b>91 - 100</b>	<b>101 - 110</b>	<b>111 - 120</b>	<b>121 - 130</b>	<b>131 - 140</b>	<b>141 - 150</b>	<b>151 - 160</b>	<b>161 - 170</b>	<b>171 - 180</b>	<b>181 - 190</b>	<b>191 - 200</b>	<b>201 - 210</b>	<b>211 PLUS</b>	<b>Total</b>
<b>BORDER LAKES</b>	16866	23598	18070	13773	9521	4657	4119	5089	5201	2690	1379	554	101	6	0	0	0	0	0	0	0	0	<b>105624</b>
BL under development	83	0	0	21	1087	1864	1371	1990	2261	453	44	118	29	0	0	0	0	0	0	0	0	0	<b>9321</b>
Border Lakes Total	16949	23598	18070	13794	10608	6521	5490	7079	7462	3143	1423	672	130	6	0	0	0	0	0	0	0	0	<b>114945</b>
<b>LAURENTIAN UPLANDS</b>	1651	2593	2064	1406	594	932	678	265	421	205	139	19	42	0	0	0	0	0	0	0	0	0	<b>11009</b>
LU under development	34	0	0	0	0	16	66	61	231	40	27	13	0	0	0	0	0	0	0	0	0	0	<b>488</b>
Laurentian Uplands Total	1685	2593	2064	1406	594	948	744	326	652	245	166	32	42	0	0	0	0	0	0	0	0	0	<b>11497</b>
<b>NASHWAUK UPLANDS</b>	4998	4532	8352	3865	1419	360	358	457	327	563	142	0	0	0	0	0	0	0	0	0	0	0	<b>25373</b>
NU under development	45	42	0	9	119	154	362	332	177	21	31	0	0	0	0	0	0	0	0	0	0	0	<b>1292</b>
Nashwauk Uplands Total	5043	4574	8352	3874	1538	514	720	789	504	584	173	0	0	0	0	0	0	0	0	0	0	0	<b>26665</b>
<b>NORTH SHORE HIGHLANDS</b>	5026	5944	11606	4504	2931	3900	3550	4301	3689	1844	1429	412	0	0	41	0	0	0	0	0	0	0	<b>49177</b>
NSH under development	287	5	41	48	433	290	92	444	335	26	40	0	0	0	0	0	0	0	0	0	0	0	<b>2041</b>
North Shore Highlands Total	5313	5949	11647	4552	3364	4190	3642	4745	4024	1870	1469	412	0	0	41	0	0	0	0	0	0	0	<b>51218</b>
<b>TOIMI UPLANDS</b>	1279	2046	2749	833	551	426	1061	701	348	25	11	0	0	0	0	0	0	0	0	0	0	0	<b>10030</b>
TU under development	223	91	0	42	38	139	80	152	129	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>894</b>
Toimi Uplands Total	1502	2137	2749	875	589	565	1141	853	477	25	11	0	0	0	0	0	0	0	0	0	0	0	<b>10924</b>
	<b>30492</b>	<b>38851</b>	<b>42882</b>	<b>24501</b>	<b>16693</b>	<b>12738</b>	<b>11737</b>	<b>13792</b>	<b>13119</b>	<b>5867</b>	<b>3242</b>	<b>1116</b>	<b>172</b>	<b>6</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>215249</b>

### Figure 4.5. 2014 Age class distribution of aspen and balm of Gilead stands

The following seven charts display the 2014 age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the commercial forest is located in each subsection.



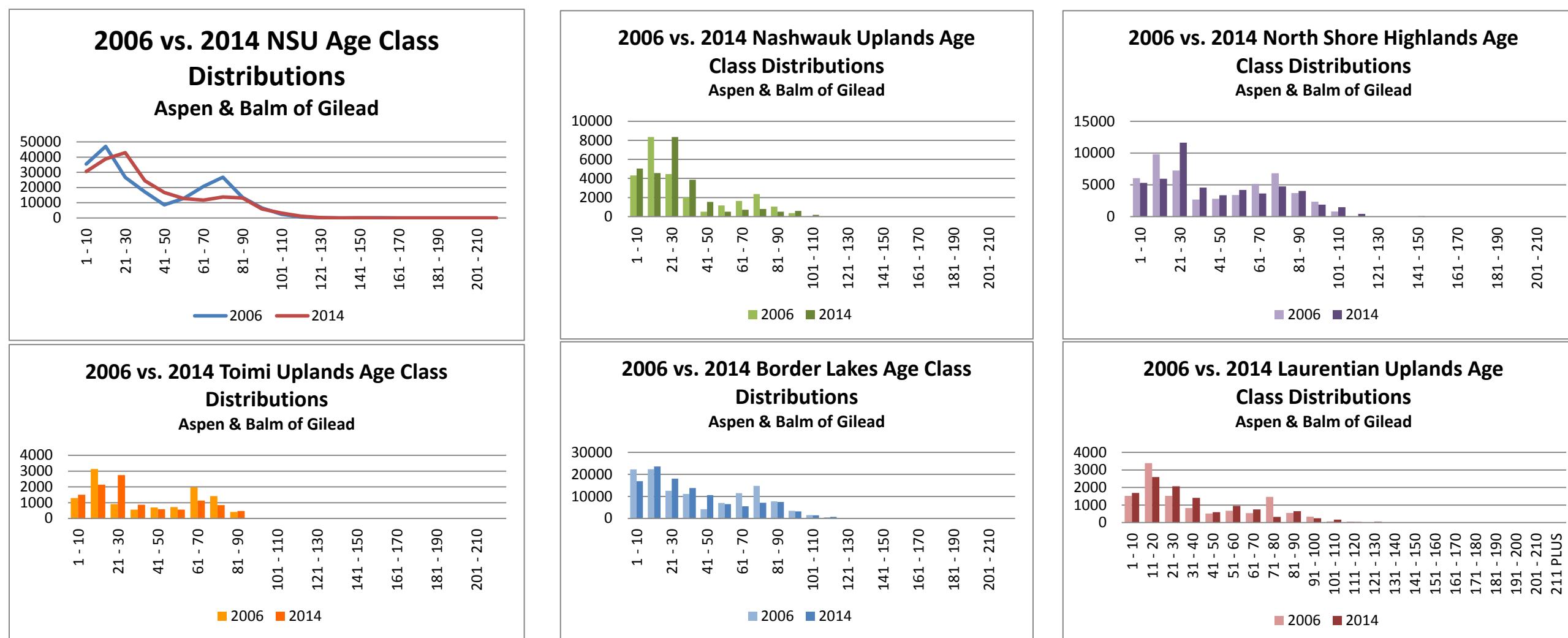
**Table 4.6. 2006 Aspen and balm of Gilead acreage by subsection and ten-year age class**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

Aspen & Balm of Gilead - 12	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	Total
BORDER LAKES	22304	22344	12551	11084	4135	6992	11480	14796	7771	3455	1501	512	64	0	0	40	0	0	0	0	0	0	119029
LAURENTIAN UPLANDS	1516	3393	1519	828	512	673	531	1462	547	339	69	60	0	0	0	0	0	0	0	0	0	0	11449
NASHWAUK UPLANDS	4310	8352	4453	2017	497	1164	1647	2358	1041	355	30	0	0	0	0	0	0	0	0	0	0	0	26224
NORTH SHORE HIGHLANDS	6032	9811	7241	2662	2799	3384	5162	6817	3687	2329	793	0	8	25	0	0	0	0	0	0	0	0	50750
TOIMI UPLANDS	1294	3137	910	568	699	723	1976	1419	412	13	0	0	0	0	0	0	0	0	0	0	0	0	11151
	<b>35456</b>	<b>47037</b>	<b>26674</b>	<b>17159</b>	<b>8642</b>	<b>12936</b>	<b>20796</b>	<b>26852</b>	<b>13458</b>	<b>6491</b>	<b>2393</b>	<b>572</b>	<b>72</b>	<b>25</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>218603</b>

**Figure 4.6. Comparison between 2006 and current (2014) aspen and balm of Gilead age class distributions**

A line graph displays the age-class distribution of aspen/balm-of-Gilead cover type for the section as a whole; five individual bar charts display the age-class distribution of the cover type for the individual subsections that make up the NSU.



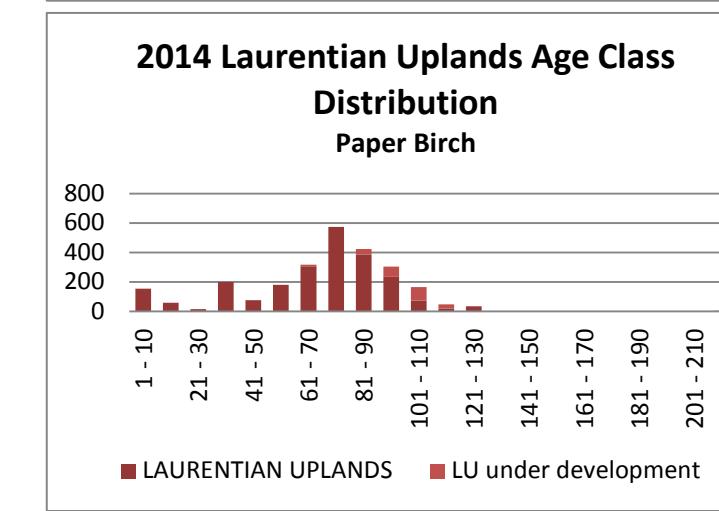
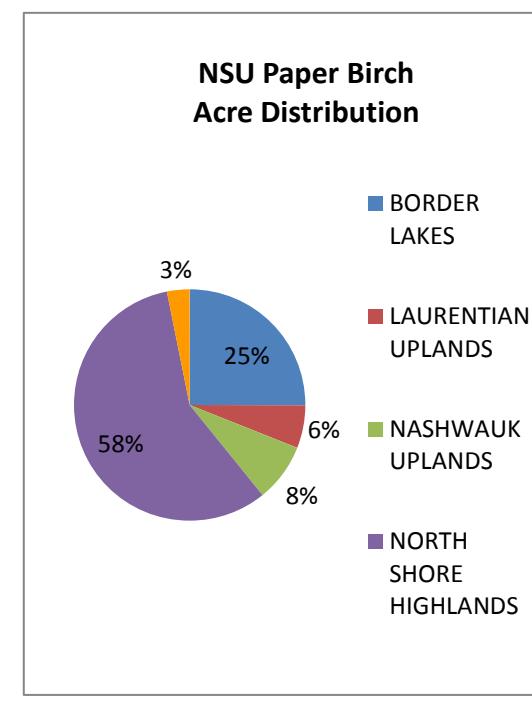
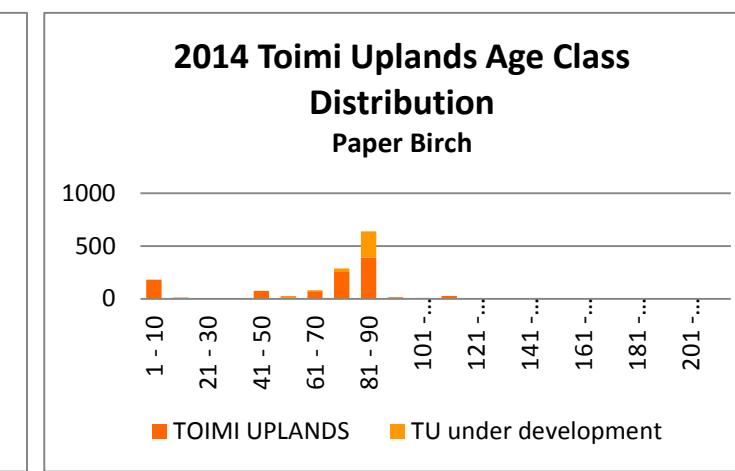
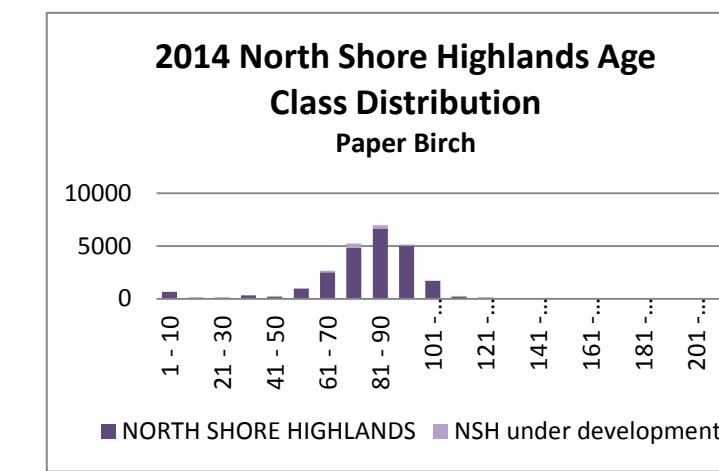
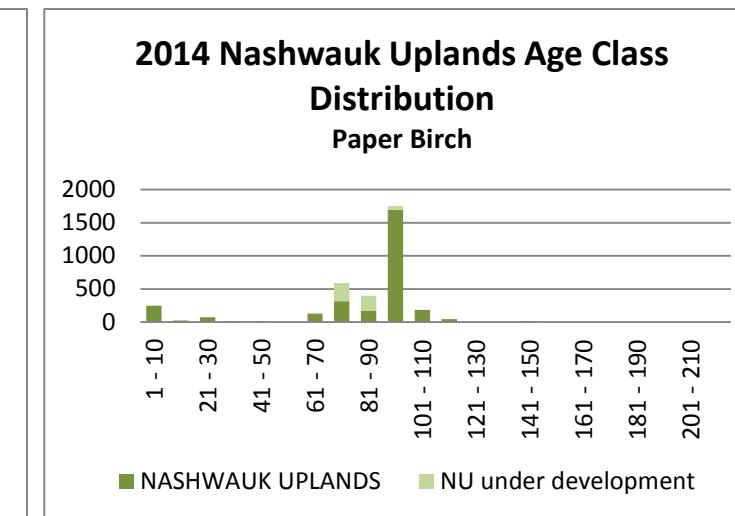
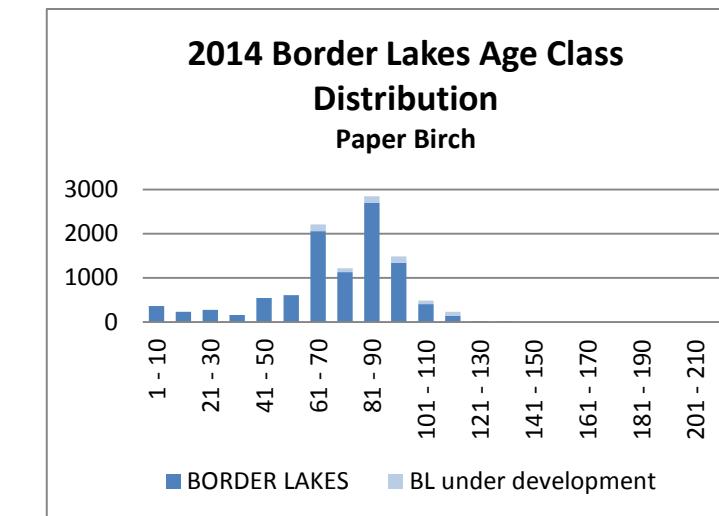
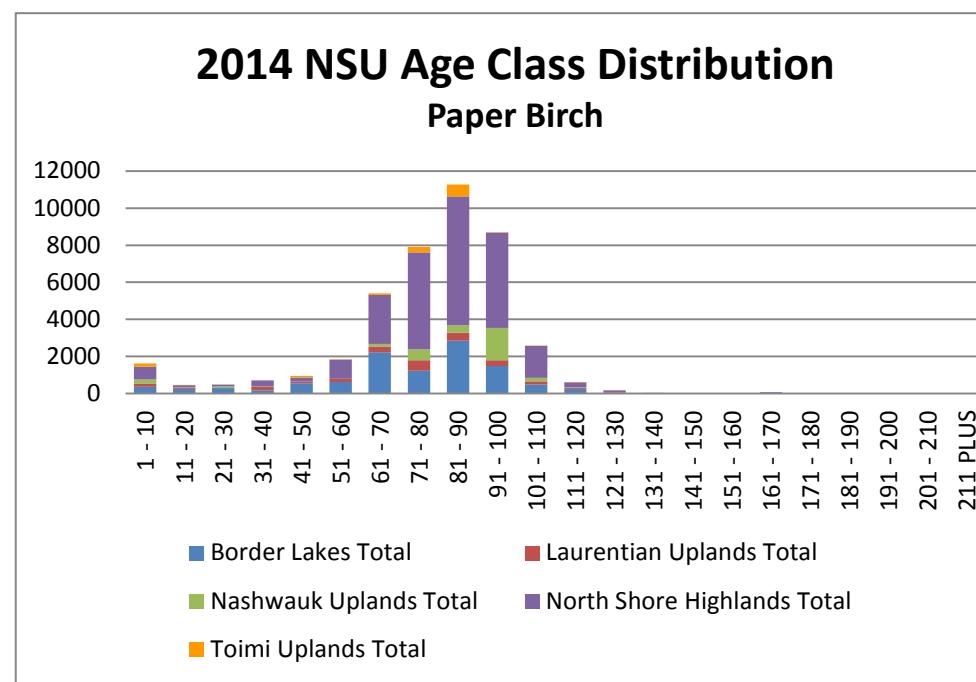
**Table 4.7. 2014 Age-class distribution of paper birch stands by ten-year age class**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

Paper Birch - 13	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	TOTAL
<b>BORDER LAKES</b>	361	235	278	162	545	606	2060	1128	2701	1340	404	141	23	17	0	0	0	0	0	0	0	0	<b>10001</b>
BL under development	0	0	0	0	0	0	154	91	148	145	79	92	0	0	0	0	0	0	0	0	0	0	<b>709</b>
Border Lakes Total	361	235	278	162	545	606	2214	1219	2849	1485	483	233	23	17	0	0	0	0	0	0	0	0	<b>10710</b>
<b>LAURENTIAN UPLANDS</b>	154	58	16	201	76	181	307	575	387	234	75	20	35	0	0	0	0	0	0	0	0	0	<b>2323</b>
LU under development	0	0	0	0	0	0	11	0	38	70	91	28	0	0	0	0	0	0	0	0	0	0	<b>238</b>
Laurentian Uplands Total	154	58	16	201	76	181	318	575	425	304	166	48	35	0	0	0	0	0	0	0	0	0	<b>2561</b>
<b>NASHWAUK UPLANDS</b>	245	26	75	12	4	0	121	315	172	1697	185	45	0	0	9	0	0	0	0	0	0	0	<b>2906</b>
NU under development	0	5	0	0	6	0	14	273	226	54	0	0	0	0	0	0	0	0	0	0	0	0	<b>578</b>
Nashwauk Uplands Total	245	31	75	12	10	0	135	588	398	1751	185	45	0	0	9	0	0	0	0	0	0	0	<b>3484</b>
<b>NORTH SHORE HIGHLANDS</b>	677	124	103	324	215	976	2511	4864	6670	5023	1703	213	105	6	0	0	54	0	0	0	0	0	<b>23568</b>
NSH under development	0	0	0	0	15	57	144	374	298	118	29	49	0	0	0	0	0	0	0	0	0	0	<b>1084</b>
North Shore Highlands Total	677	124	103	324	230	1033	2655	5238	6968	5141	1732	262	105	6	0	0	54	0	0	0	0	0	<b>24652</b>
<b>TOIMI UPLANDS</b>	181	13	0	0	74	16	71	254	392	16	8	27	0	0	0	0	0	0	0	0	0	0	<b>1052</b>
TU under development	0	0	0	0	0	10	9	33	247	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>299</b>
Toimi Uplands Total	181	13	0	0	74	26	80	287	639	16	8	27	0	0	0	0	0	0	0	0	0	0	<b>1351</b>
	<b>1618</b>	<b>461</b>	<b>472</b>	<b>699</b>	<b>935</b>	<b>1846</b>	<b>5402</b>	<b>7907</b>	<b>11279</b>	<b>8697</b>	<b>2574</b>	<b>615</b>	<b>163</b>	<b>23</b>	<b>9</b>	<b>0</b>	<b>54</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>42758</b>

### Figure 4.7. 2014 Age class distribution of paper birch for the NSU Section

The following seven charts display the 2014 age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the commercial forest is located in each subsection.



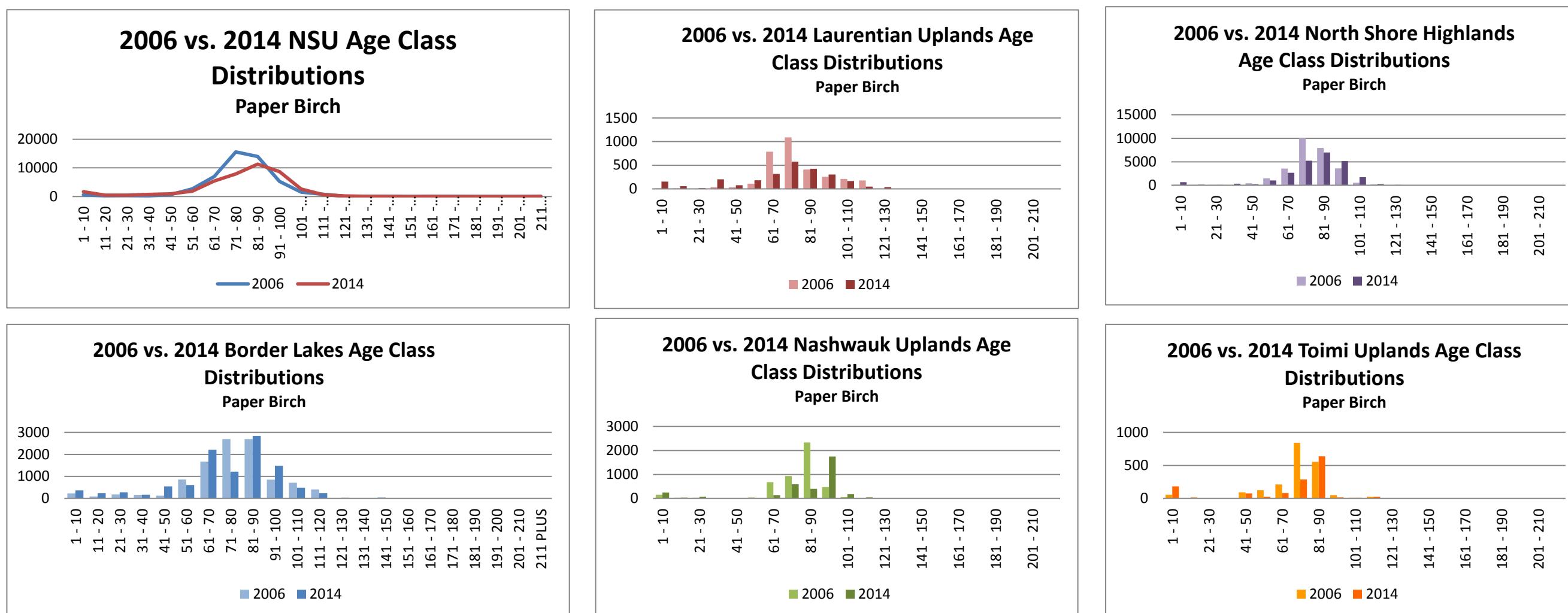
**Table 4.8. 2006 Paper birch acreage by subsection and ten-year age class**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

Paper Birch - 13	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	Total
BORDER LAKES	227	86	184	153	125	859	1668	2697	2695	856	711	405	15	4	52	0	0	5	0	0	0	0	10742
LAURENTIAN UPLANDS	12	11	0	35	32	108	787	1093	410	256	210	180	9	0	0	0	0	0	0	0	0	0	3143
NASHWAUK UPLANDS	149	21	27	12	3	43	678	937	2332	473	61	7	0	10	0	0	0	0	0	0	0	0	4753
NORTH SHORE HIGHLANDS	154	105	91	21	411	1498	3569	10046	7972	3615	545	188	38	0	0	0	0	0	0	0	0	0	28253
TOIMI UPLANDS	54	0	0	0	93	125	210	840	554	48	9	25	0	0	0	0	0	0	0	0	0	0	1958
	596	223	302	221	664	2633	6912	15613	13963	5248	1536	805	62	14	52	0	0	5	0	0	0	0	48849

**Figure 4.8. Comparison between 2006 and current (2014) paper birch age class distributions**

A line graph displays the age-class distribution of the birch cover type for the section as a whole; five individual bar charts display the age-class distribution of the cover type for the individual subsections that make up the NSU.



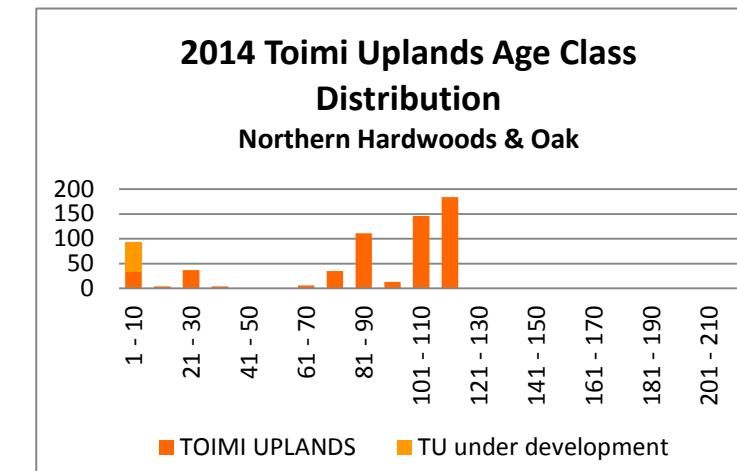
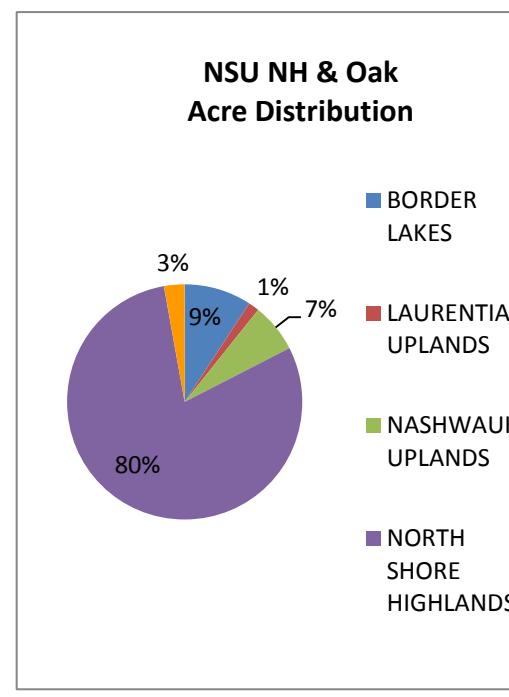
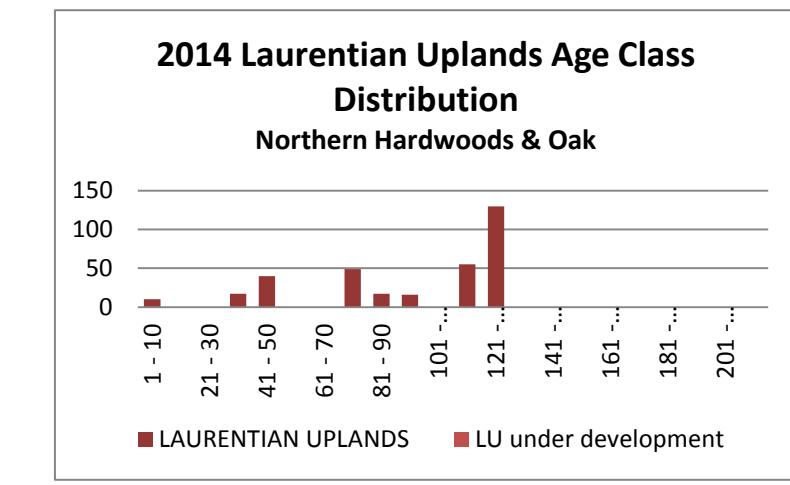
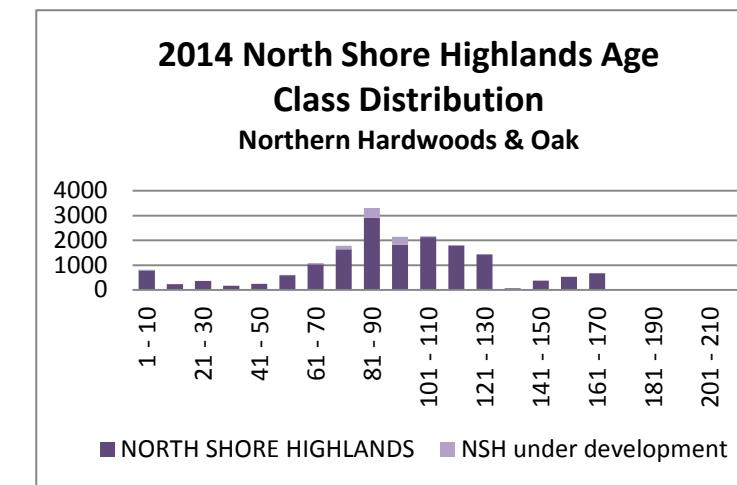
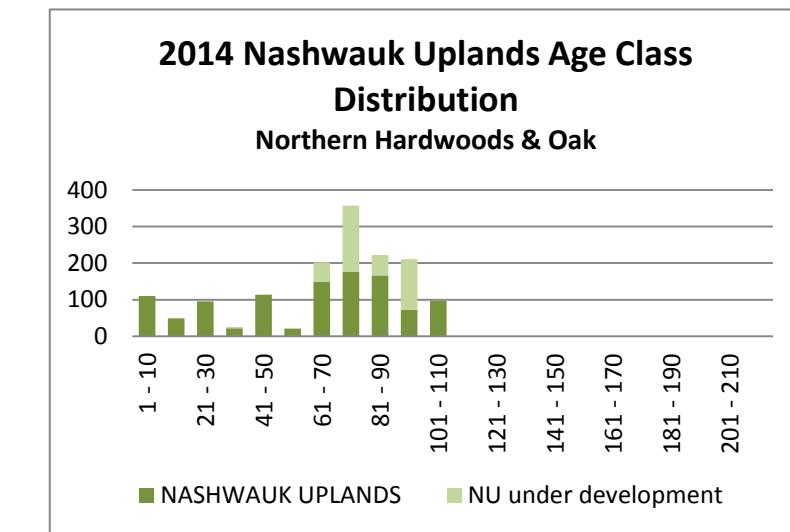
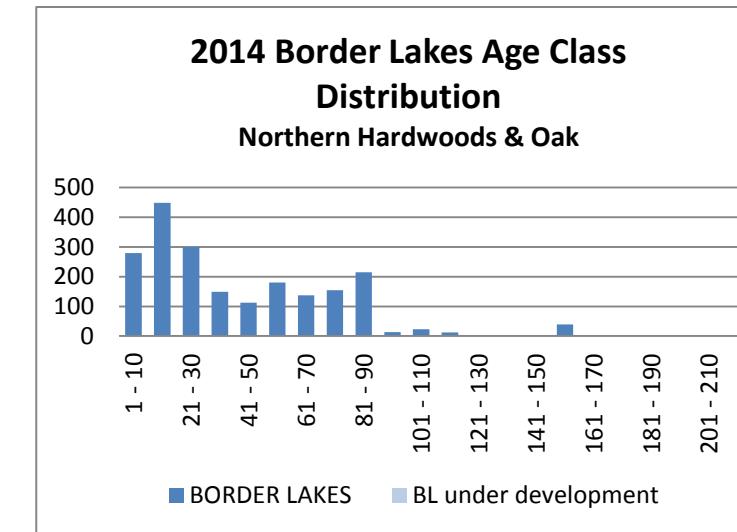
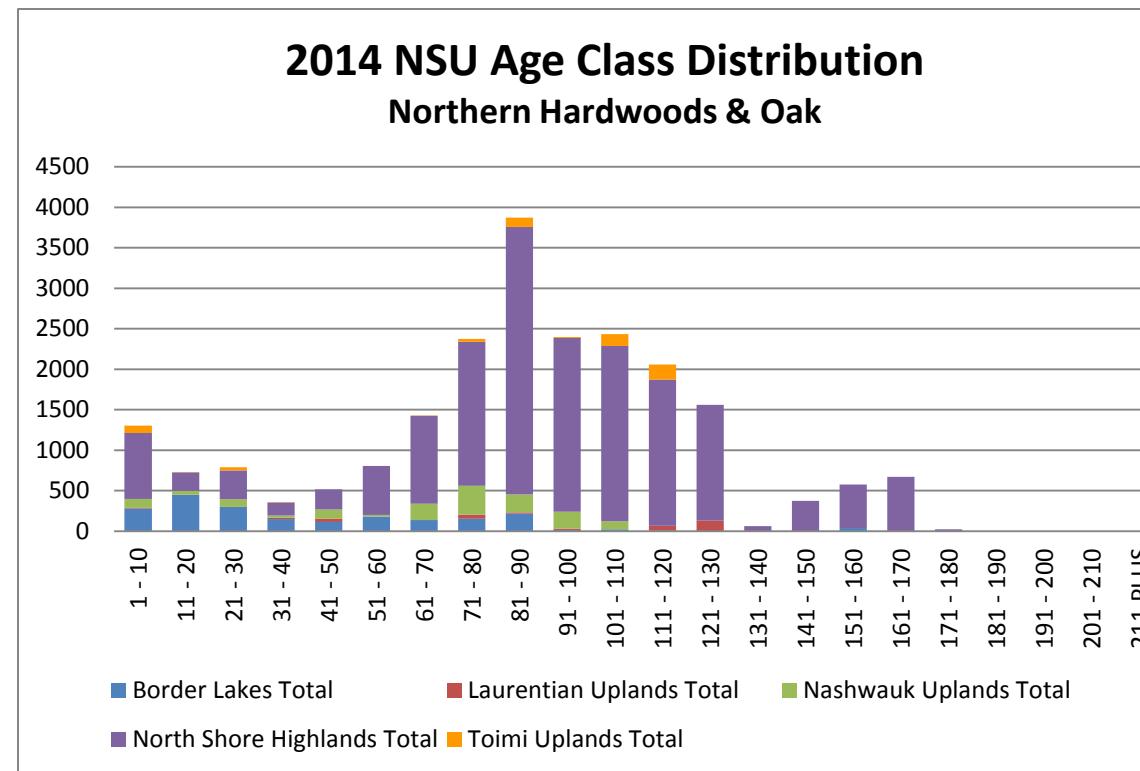
**Table 4.9. 2014 Age-class distribution of northern hardwoods and oak stands**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

Northern Hardwoods & Oak - 20	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	TOTAL
<b>BORDER LAKES</b>	279	449	300	149	113	180	137	154	215	13	23	12	0	0	0	39	0	0	0	0	0	0	<b>2063</b>
BL under development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Border Lakes Total	279	449	300	149	113	180	137	154	215	13	23	12	0	0	0	39	0	0	0	0	0	0	<b>2063</b>
<b>LAURENTIAN UPLANDS</b>	10	0	0	17	40	0	0	49	17	16	0	55	130	0	0	0	0	0	0	0	0	0	<b>334</b>
LU under development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Laurentian Uplands Total	10	0	0	17	40	0	0	49	17	16	0	55	130	0	0	0	0	0	0	0	0	0	<b>334</b>
<b>NASHWAUK UPLANDS</b>	110	49	95	22	114	21	149	177	166	72	97	0	0	0	0	0	0	0	0	0	0	0	<b>1072</b>
NU under development	0	0	0	3	0	0	53	180	56	139	0	0	0	0	0	0	0	0	0	0	0	0	<b>431</b>
Nashwauk Uplands Total	110	49	95	25	114	21	202	357	222	211	97	0	0	0	0	0	0	0	0	0	0	0	<b>1503</b>
<b>NORTH SHORE HIGHLANDS</b>	790	228	356	164	249	593	1030	1635	2902	1821	2131	1796	1429	63	376	535	672	23	0	0	0	0	<b>16793</b>
NSH under development	23	0	0	0	0	13	56	145	403	324	35	9	0	0	0	0	0	0	0	0	0	0	<b>1008</b>
North Shore Highlands Total	813	228	356	164	249	606	1086	1780	3305	2145	2166	1805	1429	63	376	535	672	23	0	0	0	0	<b>17801</b>
<b>TOIMI UPLANDS</b>	33	4	37	4	0	0	6	35	111	13	146	184	0	0	0	0	0	0	0	0	0	0	<b>573</b>
TU under development	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>59</b>
Toimi Uplands Total	92	4	37	4	0	0	6	35	111	13	146	184	0	0	0	0	0	0	0	0	0	0	<b>632</b>
	<b>1304</b>	<b>730</b>	<b>788</b>	<b>359</b>	<b>516</b>	<b>807</b>	<b>1431</b>	<b>2375</b>	<b>3870</b>	<b>2398</b>	<b>2432</b>	<b>2056</b>	<b>1559</b>	<b>63</b>	<b>376</b>	<b>574</b>	<b>672</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22333</b>

### Figure 4.9. 2014 Age-class distribution of northern hardwoods and oak

The following seven charts display the age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the cover type is located in each subsection.



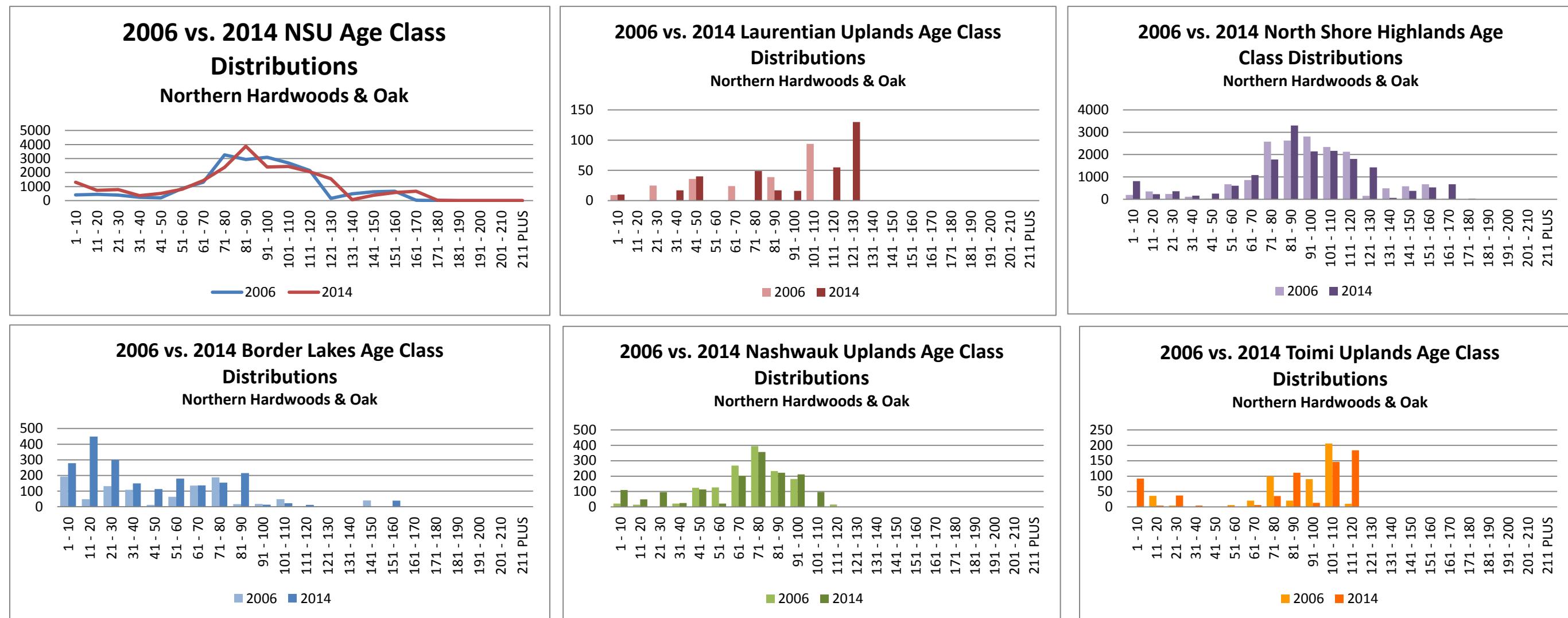
**Table 4.10. 2006 Northern hardwoods and oak acreage by subsection and ten-year age class**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

Northern Hardwoods & Oak - 20	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	Total
BORDER LAKES	193	49	132	108	12	64	136	188	17	18	49	2	0	0	41	0	0	0	0	0	0	0	1009
LAURENTIAN UPLANDS	9	0	25	0	36	0	24	0	39	0	94	0	0	0	0	0	0	0	0	0	0	0	227
NASHWAUK UPLANDS	21	14	0	22	124	126	269	395	233	182	0	15	0	0	0	0	0	0	0	0	0	0	1401
NORTH SHORE HIGHLANDS	190	350	237	109	21	671	864	2576	2630	2807	2340	2124	156	488	583	672	23	0	0	0	0	0	16841
TOIMI UPLANDS	0	36	4	0	0	6	20	100	20	90	206	10	0	0	0	0	0	0	0	0	0	0	492
	413	449	398	239	193	867	1313	3259	2939	3097	2689	2151	156	488	624	672	23	0	0	0	0	0	19970

**Figure 4.10. Comparison between 2006 and current (2014) northern hardwoods and oak age class distributions**

A line graph displays the age-class distribution of the northern hardwoods and oak cover types for the section as a whole; five individual bar charts display the age-class distribution of the cover types for the individual subsections that make up the NSU.



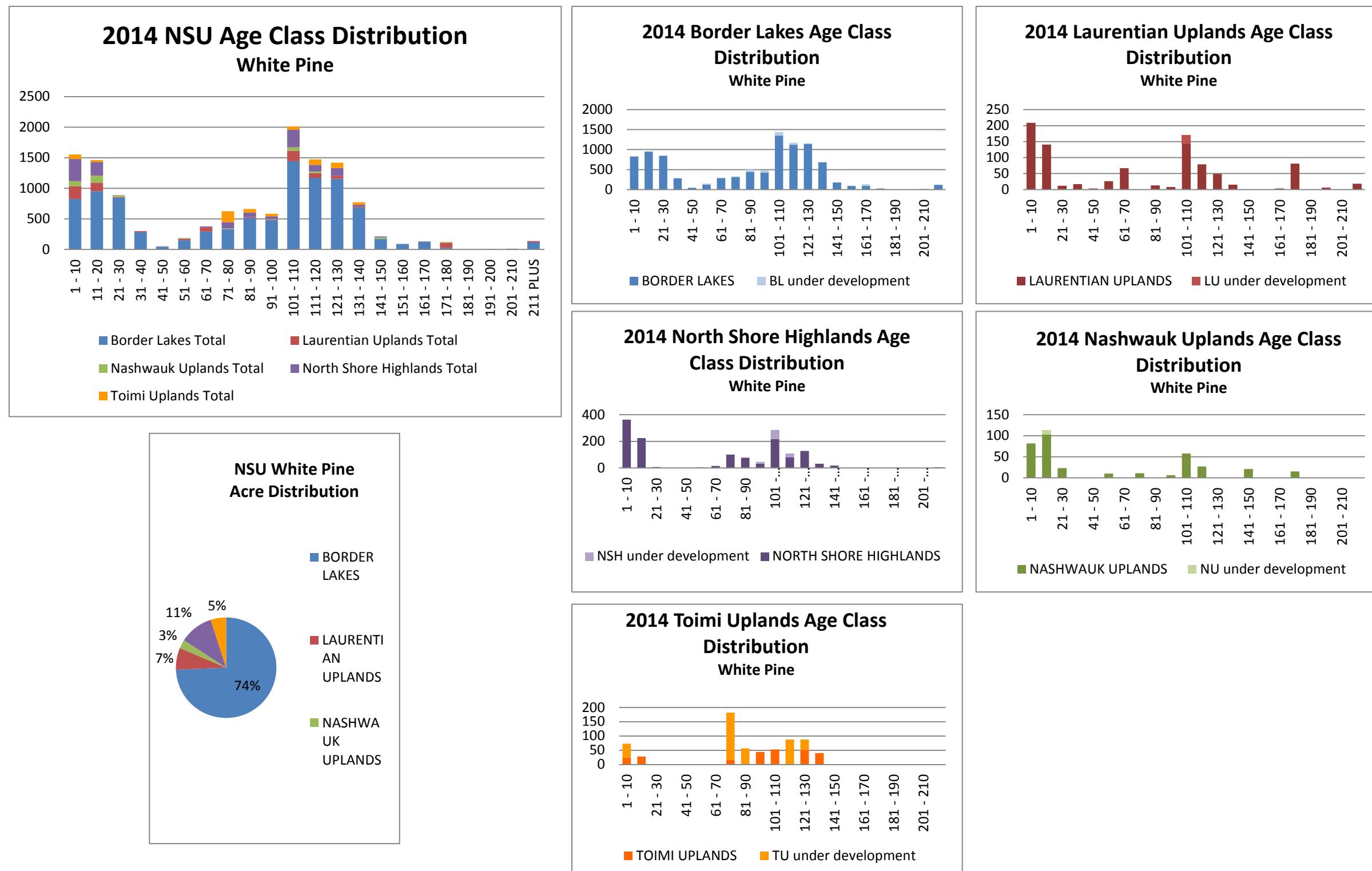
**Table 4.11. 2014 Age-class distribution of white pine stands**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

White Pine - 51	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	TOTAL
<b>BORDER LAKES</b>	827	953	845	282	46	121	288	309	441	423	1352	1119	1143	679	175	92	89	27	0	0	12	116	<b>9339</b>
BL under development	0	0	0	0	29	6	26	76	60	91	51	13	8	0	0	41	0	0	0	0	0	0	<b>401</b>
Border Lakes Total	827	953	845	282	46	150	294	335	517	483	1443	1170	1156	687	175	92	130	27	0	0	12	116	<b>9740</b>
<b>LAURENTIAN UPLANDS</b>	209	141	12	17	3	26	67	0	13	8	143	79	49	15	0	0	3	81	0	6	0	18	<b>890</b>
LU under development	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	<b>27</b>
Laurentian Uplands Total	209	141	12	17	3	26	67	0	13	8	170	79	49	15	0	0	3	81	0	6	0	18	<b>917</b>
<b>NASHWAUK UPLANDS</b>	82	103	23	0	0	10	0	11	0	6	58	27	0	0	21	0	0	15	0	0	0	0	<b>356</b>
NU under development	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>11</b>
Nashwauk Uplands Total	82	114	23	0	0	10	0	11	0	6	58	27	0	0	21	0	0	15	0	0	0	0	<b>367</b>
<b>NORTH SHORE HIGHLANDS</b>	363	225	7	0	1	5	16	100	77	32	217	81	128	32	18	0	0	0	0	0	0	0	<b>1308</b>
NSH under development	0	0	0	0	0	0	0	0	13	69	28	0	0	0	0	0	0	0	0	0	0	0	<b>110</b>
North Shore Highlands Total	363	225	7	0	1	5	16	100	77	45	286	109	128	32	18	0	0	0	0	0	0	0	<b>1418</b>
<b>TOIMI UPLANDS</b>	24	28	0	0	0	0	0	17	0	44	53	0	51	40	0	0	0	0	0	0	0	0	<b>257</b>
TU under development	49	0	0	0	0	0	0	165	57	0	0	88	37	0	0	0	0	0	0	0	0	0	<b>396</b>
Toimi Uplands Total	73	28	0	0	0	0	0	182	57	44	53	88	88	40	0	0	0	0	0	0	0	0	<b>653</b>
	<b>1554</b>	<b>1461</b>	<b>887</b>	<b>299</b>	<b>50</b>	<b>191</b>	<b>377</b>	<b>628</b>	<b>664</b>	<b>586</b>	<b>2010</b>	<b>1473</b>	<b>1421</b>	<b>774</b>	<b>214</b>	<b>92</b>	<b>133</b>	<b>123</b>	<b>0</b>	<b>6</b>	<b>12</b>	<b>140</b>	<b>13095</b>

**Figure 4.11. 2014 Age-class distribution of white pine stands**

The following seven charts display the age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the cover type is located in each subsection



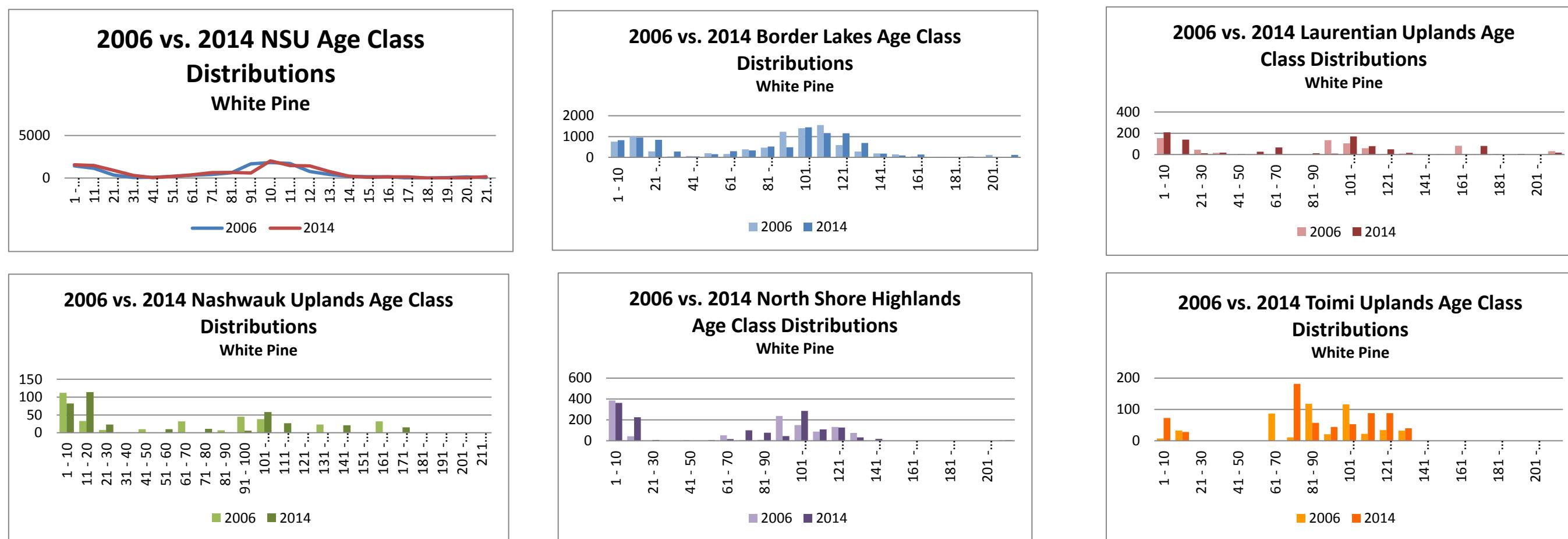
**Table 4.12. 2006 White pine acreage by subsection and ten-year age class**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

White Pine - 51	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	Total
BORDER LAKES	754	1024	288	44	63	194	157	389	465	1234	1400	1551	594	280	185	141	41	0	0	46	118	0	8968
LAURENTIAN UPLANDS	154	0	45	15	0	0	0	0	0	136	105	59	5	8	0	3	82	0	6	0	0	31	649
NASHWAUK UPLANDS	112	33	8	0	10	0	32	0	7	45	38	0	0	23	0	0	32	0	0	0	0	0	340
NORTH SHORE HIGHLANDS	387	43	0	0	5	0	53	6	10	238	151	87	133	75	0	0	0	0	0	0	0	6	1194
TOIMI UPLANDS	7	33	0	0	0	0	87	11	118	21	116	22	34	32	0	0	0	0	0	0	0	0	481
	1414	1133	341	59	78	194	329	406	600	1674	1810	1719	766	418	185	144	155	0	6	46	118	37	11632

**Figure 4.12. Comparison between 2006 and current (2014) white pine age-class distributions**

A line graph displays the age-class distribution of the white pine cover type for the section as a whole; five individual bar charts display the age-class distribution of the cover types for the individual subsections that make up the NSU.



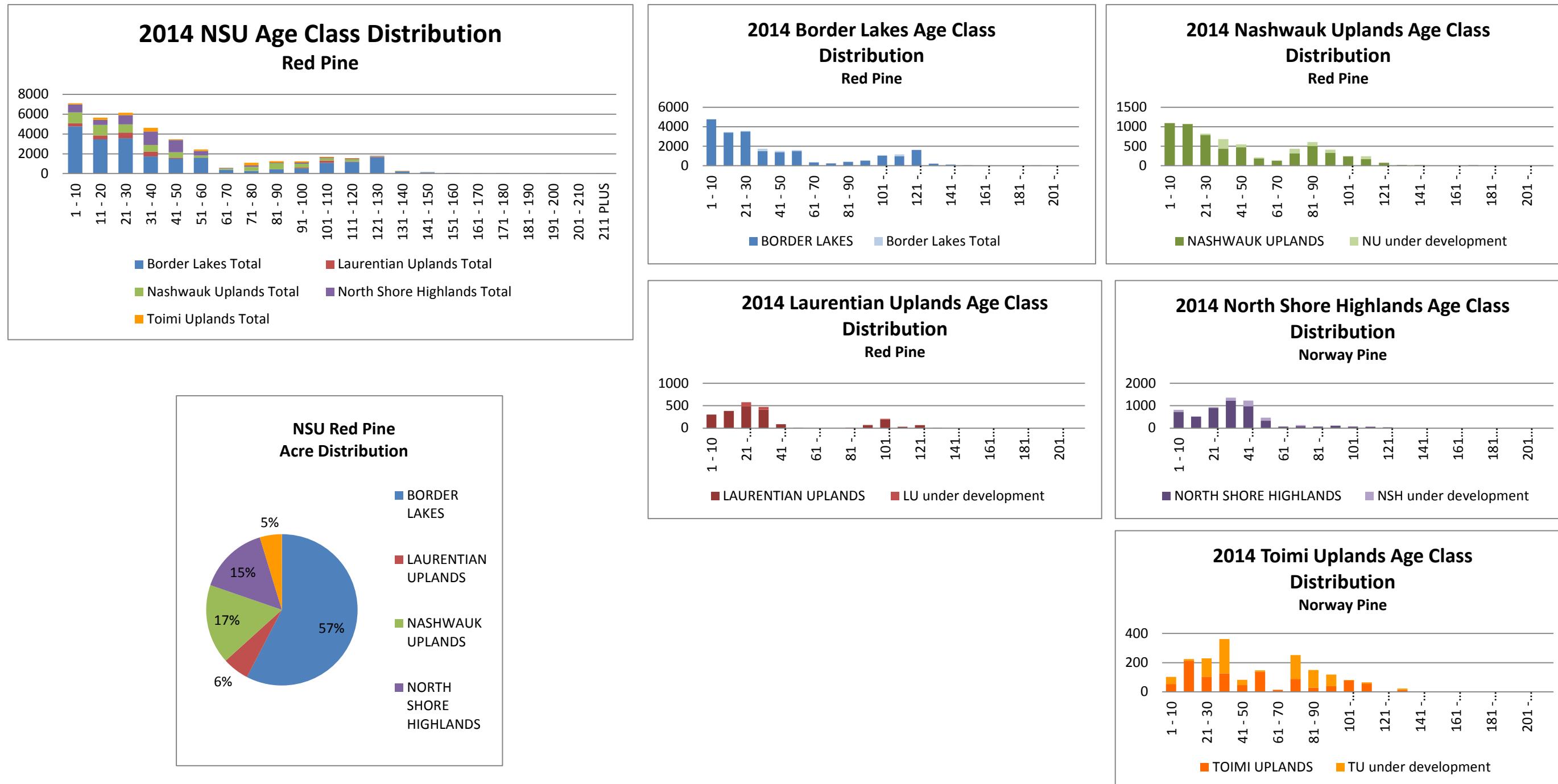
**Table 4.13. 2014 Age-class distribution of red pine stands**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

Red Pine - 52	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 +	TOTAL
<b>BORDER LAKES</b>	4770	3414	3516	1504	1380	1503	329	246	381	517	1033	974	1604	214	112	37	15	28	0	46	0	11	<b>21634</b>
BL under development	0	44	56	231	134	100	39	14	45	8	61	188	36	21	10	19	0	0	0	0	0	0	<b>1006</b>
Border Lakes Total	4770	3458	3572	1735	1514	1603	368	260	426	525	1094	1162	1640	235	122	56	15	28	0	46	0	11	<b>22640</b>
<b>LAURENTIAN UPLANDS</b>	304	385	485	412	86	5	0	0	11	63	199	32	67	4	0	0	0	0	0	0	0	0	<b>2053</b>
LU under development	0	0	92	60	0	0	0	0	0	9	10	0	0	2	0	0	0	0	0	0	0	0	<b>173</b>
Laurentian Uplands Total	304	385	577	472	86	5	0	0	11	72	209	32	67	6	0	0	0	0	0	0	0	0	<b>2226</b>
<b>NASHWAUK UPLANDS</b>	1096	1071	789	441	472	189	128	316	507	329	239	169	73	17	18	0	0	16	5	0	0	9	<b>5884</b>
NU under development	5	6	36	242	76	21	15	119	102	82	10	76	0	0	0	0	0	0	0	0	0	0	<b>790</b>
Nashwauk Uplands Total	1101	1077	825	683	548	210	143	435	609	411	249	245	73	17	18	0	0	16	5	0	0	9	<b>6674</b>
<b>NORTH SHORE HIGHLANDS</b>	725	513	903	1222	982	334	67	97	69	108	70	64	34	0	0	0	0	0	0	0	0	0	<b>5188</b>
NSH under development	92	0	32	137	251	136	0	41	0	0	0	5	0	0	4	0	0	0	0	0	0	0	<b>698</b>
North Shore Highlands Total	817	513	935	1359	1233	470	67	138	69	108	70	69	34	0	4	0	0	0	0	0	0	0	<b>5886</b>
<b>TOIMI UPLANDS</b>	54	213	103	126	46	139	14	89	29	39	77	57	0	13	0	0	0	0	0	0	0	0	<b>999</b>
TU under development	48	12	127	236	37	8	0	163	121	79	4	8	0	10	0	0	0	0	0	0	0	0	<b>853</b>
Toimi Uplands Total	102	225	230	362	83	147	14	252	150	118	81	65	0	23	0	0	0	0	0	0	0	0	<b>1852</b>
	<b>7094</b>	<b>5658</b>	<b>6139</b>	<b>4611</b>	<b>3464</b>	<b>2435</b>	<b>592</b>	<b>1085</b>	<b>1265</b>	<b>1234</b>	<b>1703</b>	<b>1573</b>	<b>1814</b>	<b>281</b>	<b>144</b>	<b>56</b>	<b>15</b>	<b>44</b>	<b>5</b>	<b>46</b>	<b>0</b>	<b>20</b>	<b>39278</b>

### Figure 4.13. 2014 Age-class distribution of red pine stands

The following seven charts display the age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the cover type is located in each subsection



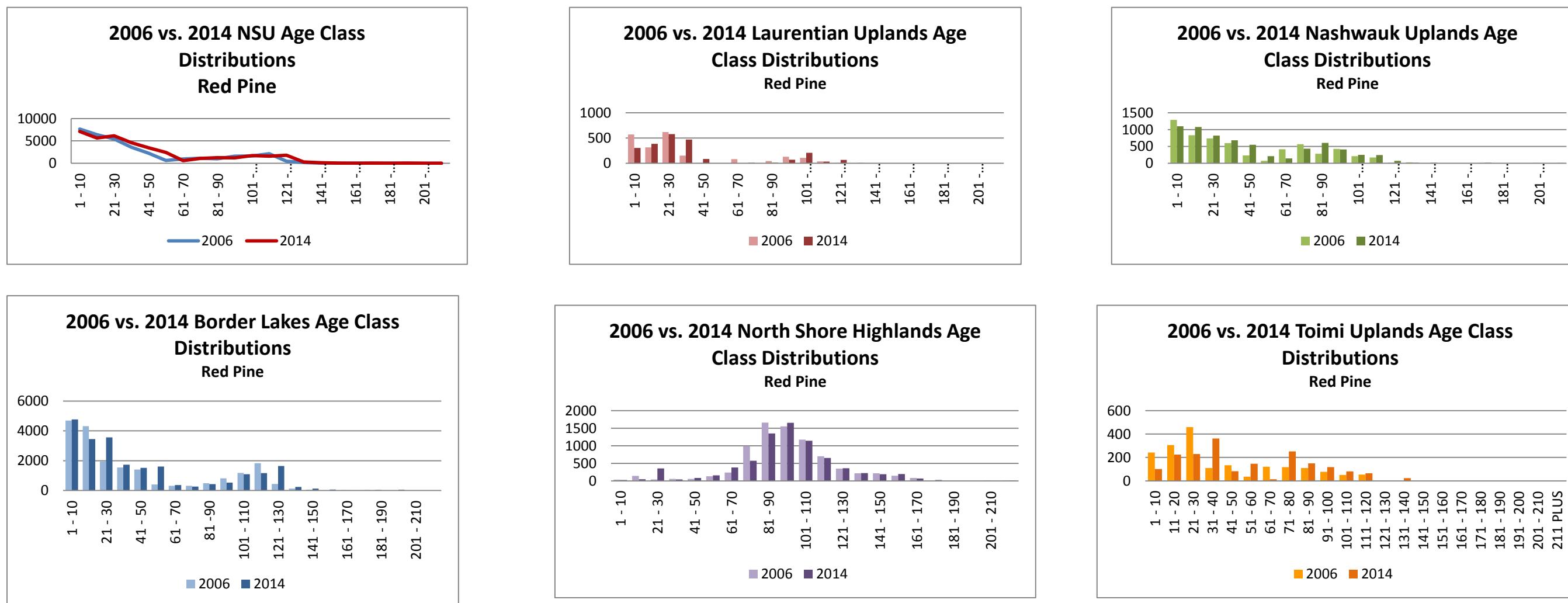
**Table 4.14. 2006 Red pine acreage by subsection and ten-year age class**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

Red Pine - 52	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	Total
BORDER LAKES	4701	4324	1945	1548	1405	403	312	316	486	809	1182	1829	444	128	46	17	28	0	44	3	0	10	19980
LAURENTIAN UPLANDS	572	317	619	153	7	0	82	16	46	129	108	39	7	0	0	0	0	0	0	3	0	0	2098
NASHWAUK UPLANDS	1292	833	738	599	235	70	415	565	285	430	214	170	15	26	0	0	0	14	5	0	9	0	5915
NORTH SHORE HIGHLANDS	843	625	1682	1191	470	129	43	110	63	160	74	34	0	0	7	0	0	0	0	0	0	0	5431
TOIMI UPLANDS	243	307	460	109	134	36	121	118	109	77	51	53	0	0	0	0	0	0	0	0	0	0	1818
	<b>7651</b>	<b>6406</b>	<b>5444</b>	<b>3600</b>	<b>2251</b>	<b>638</b>	<b>973</b>	<b>1125</b>	<b>989</b>	<b>1605</b>	<b>1629</b>	<b>2125</b>	<b>466</b>	<b>154</b>	<b>53</b>	<b>17</b>	<b>28</b>	<b>14</b>	<b>49</b>	<b>3</b>	<b>12</b>	<b>10</b>	<b>35242</b>

**Figure 4.14. Comparison between 2006 and current (2014) red pine age-class distributions**

A line graph displays the age-class distribution of the red pine cover type for the section as a whole; five individual bar charts display the age-class distribution of the cover types for the individual subsections that make up the NSU.



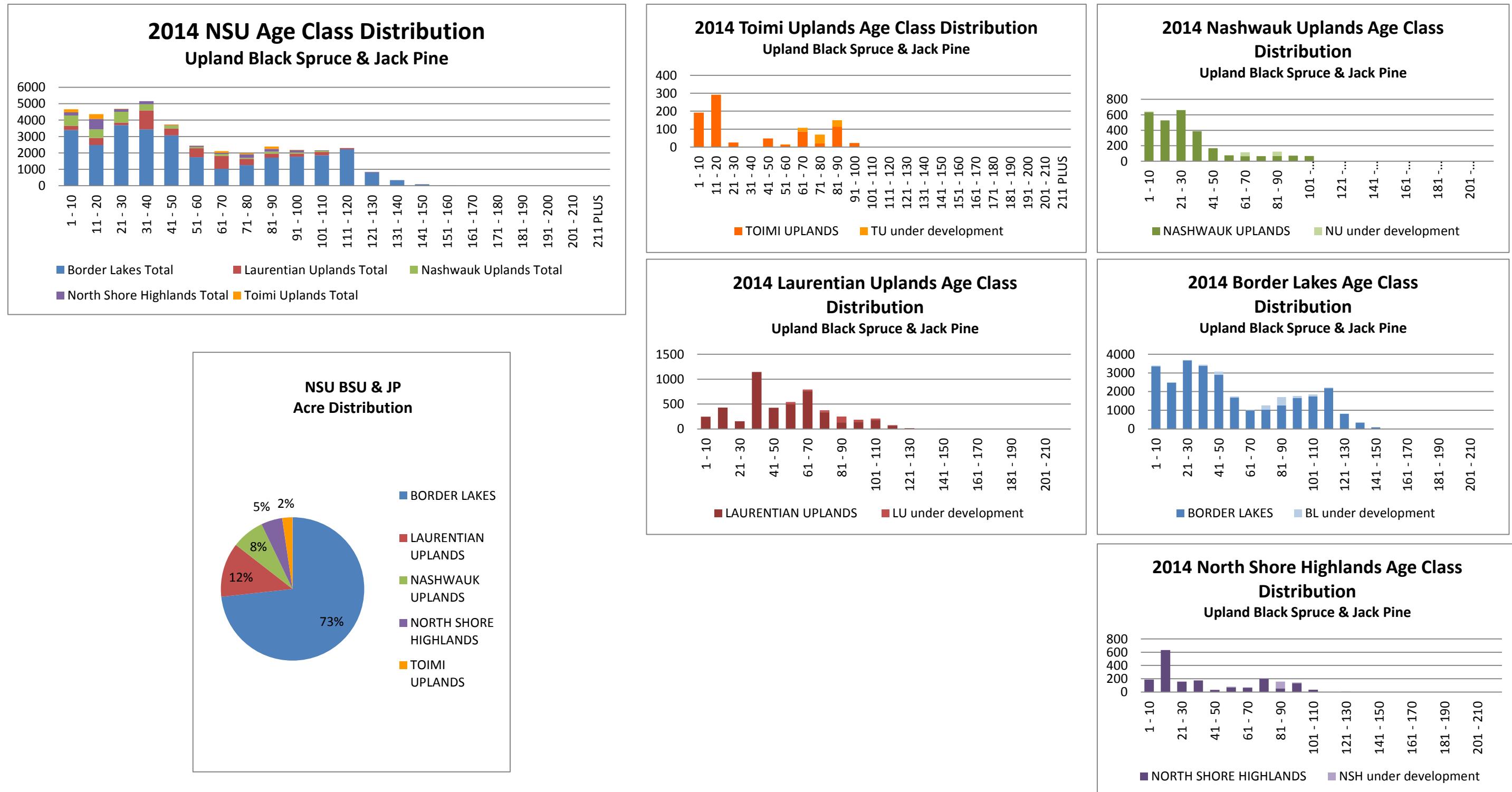
**Table 4.15. 2014 Age-class distribution of upland black spruce and jack pine stands**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

Upland Black Spruce & Jack Pine - 53	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	TOTAL
<b>BORDER LAKES</b>	3360	2486	3681	3375	2902	1683	990	1034	1259	1665	1750	2186	813	336	83	2	0	0	0	0	0	0	<b>27605</b>
BL under development	38	0	15	69	165	58	38	228	450	104	101	39	6	11	0	0	0	0	0	0	0	<b>1322</b>	
Border Lakes Total	3398	2486	3696	3444	3067	1741	1028	1262	1709	1769	1851	2225	819	347	83	2	0	0	0	0	0	0	<b>28927</b>
<b>LAURENTIAN UPLANDS</b>	245	429	154	1144	425	496	765	338	130	140	175	67	17	0	4	0	0	0	0	0	0	0	<b>4529</b>
LU under development	0	0	0	0	0	45	27	38	121	45	35	9	0	0	0	0	0	0	0	0	0	<b>320</b>	
Laurentian Uplands Total	245	429	154	1144	425	541	792	376	251	185	210	76	17	0	4	0	0	0	0	0	0	0	<b>4849</b>
<b>NASHWAUK UPLANDS</b>	632	527	662	388	169	77	66	66	69	72	69	0	0	0	0	0	0	0	0	0	0	0	<b>2797</b>
NU under development	12	0	0	0	0	0	51	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>119</b>
Nashwauk Uplands Total	644	527	662	388	169	77	117	66	125	72	69	0	0	0	0	0	0	0	0	0	0	0	<b>2916</b>
<b>NORTH SHORE HIGHLANDS</b>	187	633	158	176	32	70	66	199	54	133	35	0	4	0	0	0	0	0	0	0	0	0	<b>1747</b>
NSH under development	0	0	0	0	0	11	4	10	102	11	0	0	0	0	0	0	0	0	0	0	0	0	<b>138</b>
North Shore Highlands Total	187	633	158	176	32	81	70	209	156	144	35	0	4	0	0	0	0	0	0	0	0	0	<b>1885</b>
<b>TOIMI UPLANDS</b>	192	292	25	0	48	11	85	20	114	22	0	0	0	0	0	0	0	0	0	0	0	0	<b>809</b>
TU under development	0	0	0	0	0	4	22	49	35	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>110</b>
Toimi Uplands Total	192	292	25	0	48	15	107	69	149	22	0	0	0	0	0	0	0	0	0	0	0	0	<b>919</b>
	<b>4666</b>	<b>4367</b>	<b>4695</b>	<b>5152</b>	<b>3741</b>	<b>2455</b>	<b>2114</b>	<b>1982</b>	<b>2390</b>	<b>2192</b>	<b>2165</b>	<b>2301</b>	<b>840</b>	<b>347</b>	<b>87</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39496</b>

### Figure 4.15. 2014 Upland black spruce and jack pine age-class distributions

The following seven charts display the age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the cover type is located in each subsection.



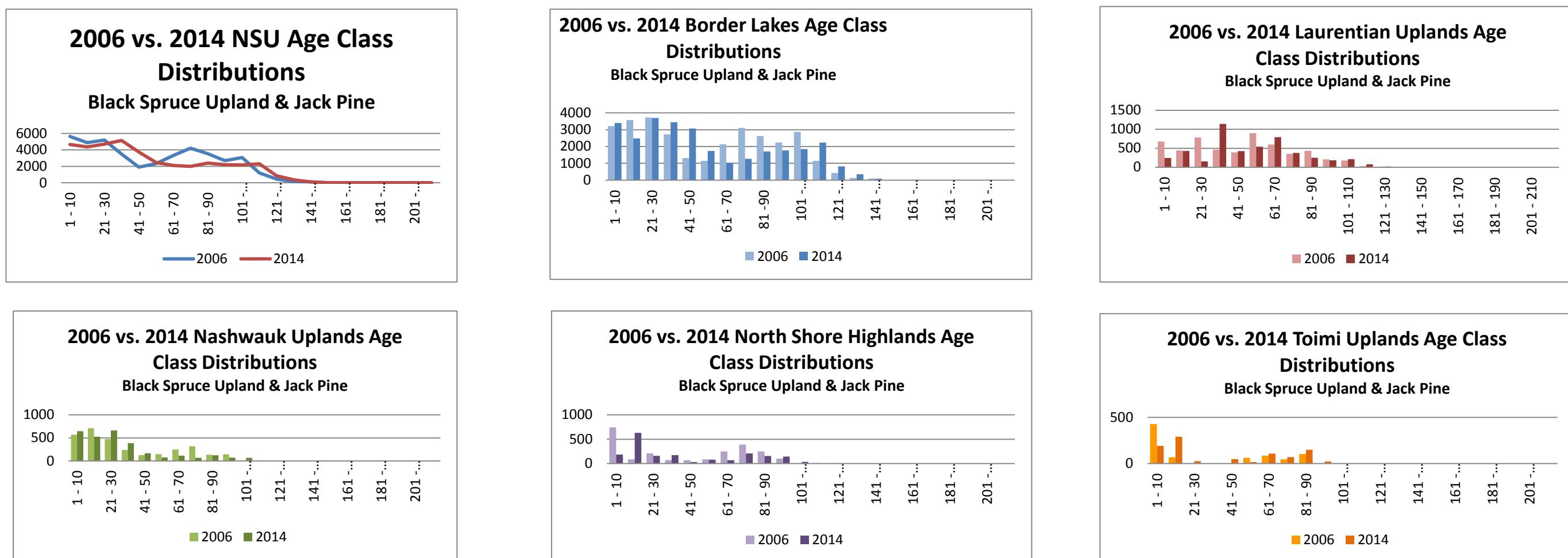
**Table 4.16. 2006 Upland black spruce and jack pine age-classes by subsection and ten-year age class**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

Black Spruce Upland & Jack Pine - 53	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	Total	
BORDER LAKES	3217	3578	3725	2725	1310	1142	2128	3102	2619	2244	2875	1148	423	130	99	0	0	0	0	0	0	0	0	30465
LAURENTIAN UPLANDS	677	444	783	465	392	900	598	353	436	206	179	26	18	9	0	0	0	0	0	0	0	0	0	5486
NASHWAUK UPLANDS	570	710	473	238	128	146	247	318	137	143	7	0	0	0	0	0	0	0	0	0	0	0	0	3117
NORTH SHORE HIGHLANDS	744	87	211	72	68	86	249	390	249	104	3	14	12	0	0	0	0	0	0	0	0	0	0	2289
TOIMI UPLANDS	429	67	0	0	0	61	85	45	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	791
	5637	4886	5192	3500	1898	2335	3307	4208	3545	2697	3064	1188	453	139	99	0	0	0	0	0	0	0	0	42148

**Figure 4.16. Comparison between 2006 and current (2014) age class distributions of upland black spruce and jack pine**

A line graph displays the age-class distribution of the upland black spruce and jack pine cover types for the section as a whole; five individual bar charts display the age-class distribution of the cover types for the individual subsections that make up the NSU.



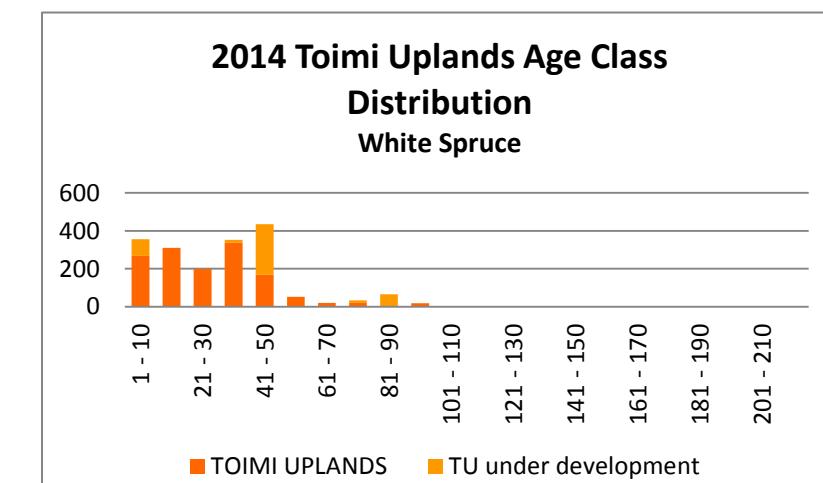
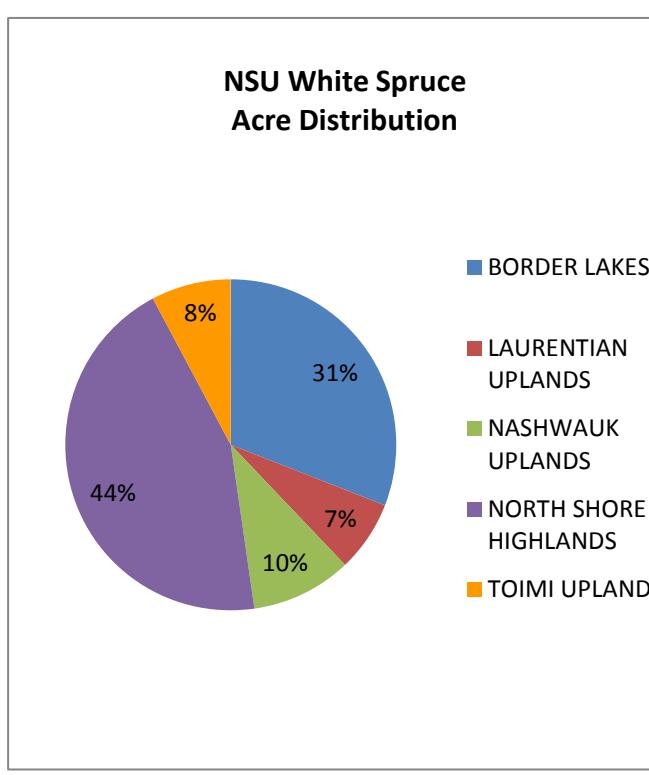
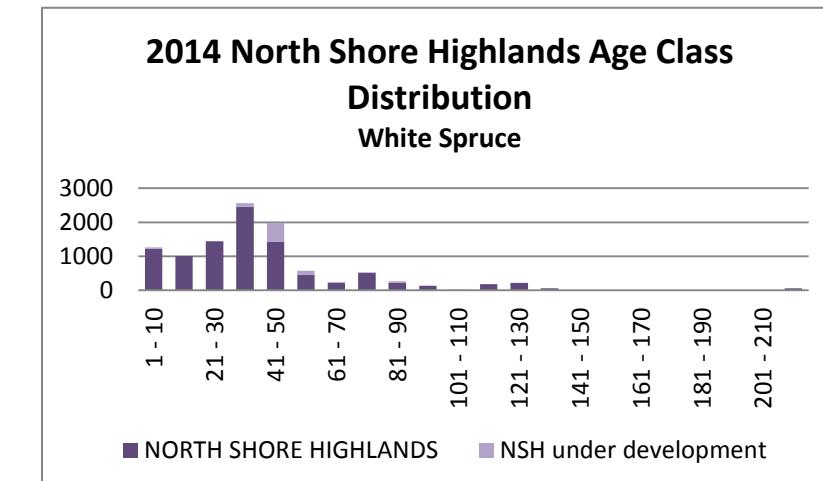
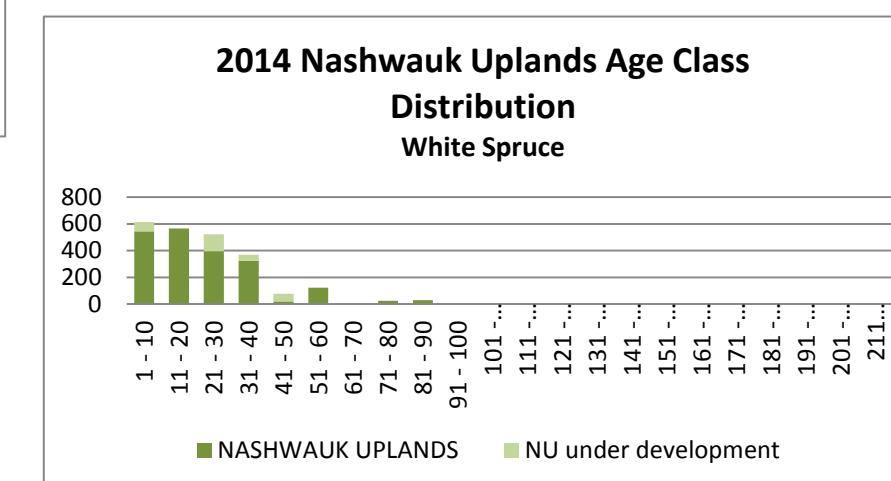
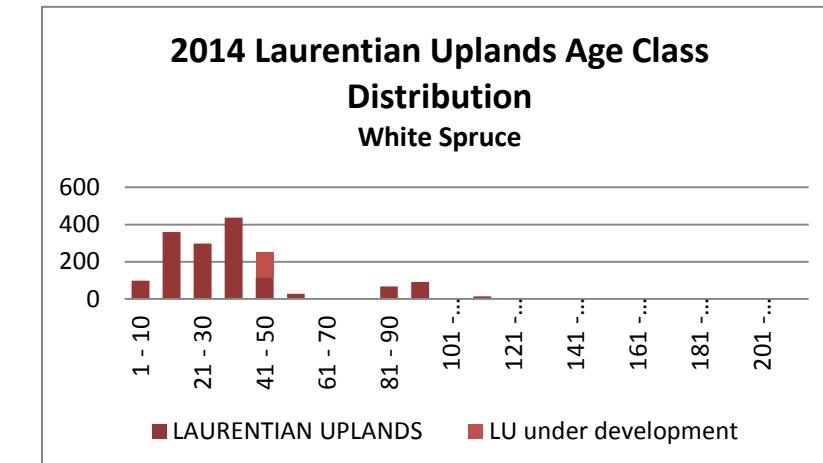
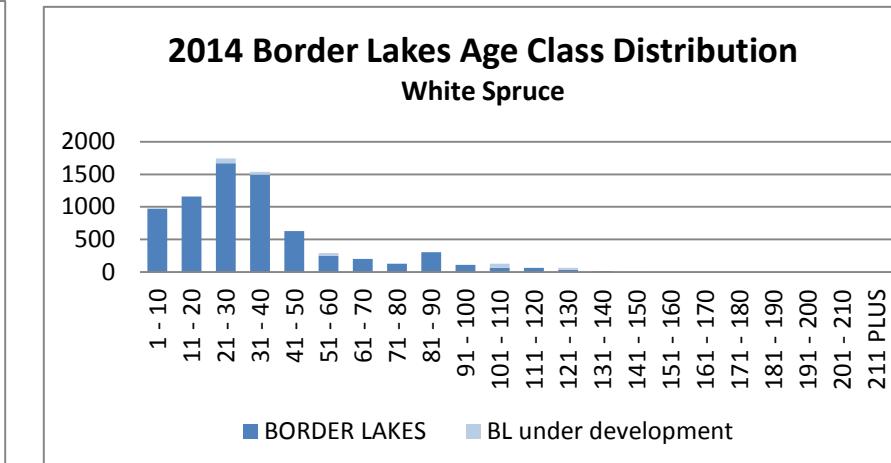
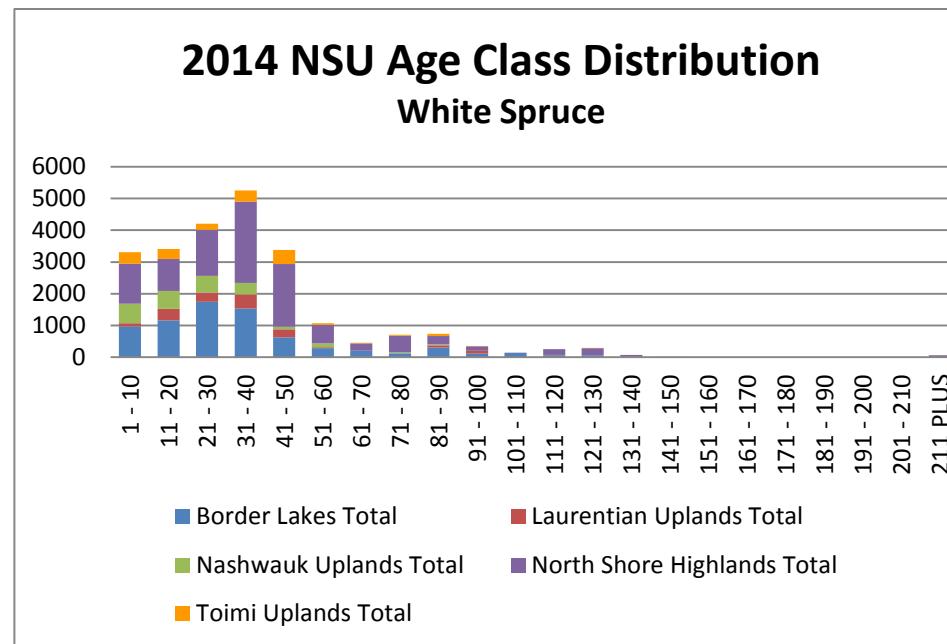
**Table 4.17. 2014 Age-class distribution of white spruce stands**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

White Spruce - 61	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	TOTAL	
<b>BORDER LAKES</b>	972	1160	1669	1493	629	247	202	124	305	108	62	61	33	15	0	0	0	0	0	0	0	0	0	<b>7080</b>
BL under development	0	0	75	42	0	40	0	0	0	3	66	0	31	0	4	0	0	0	0	0	0	0	0	<b>261</b>
Border Lakes Total	972	1160	1744	1535	629	287	202	124	305	111	128	61	64	15	4	0	0	0	0	0	0	0	0	<b>7341</b>
<b>LAURENTIAN UPLANDS</b>	98	359	297	437	117	28	0	0	67	92	0	14	0	0	0	0	0	0	0	0	0	0	0	<b>1509</b>
LU under development	0	0	0	0	134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>134</b>
Laurentian Uplands Total	98	359	297	437	251	28	0	0	67	92	0	14	0	0	0	0	0	0	0	0	0	0	0	<b>1643</b>
<b>NASHWAUK UPLANDS</b>	545	567	396	325	20	124	0	24	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>2030</b>
NU under development	68	0	127	45	57	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>300</b>
Nashwauk Uplands Total	613	567	523	370	77	124	0	24	29	3	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>2330</b>
<b>NORTH SHORE HIGHLANDS</b>	1223	1011	1446	2462	1435	457	234	508	233	133	12	182	223	61	0	0	0	0	0	0	0	0	56	<b>9676</b>
NSH under development	44	0	0	98	548	122	0	20	37	0	6	0	0	0	0	0	0	0	0	0	0	0	0	<b>875</b>
North Shore Highlands Total	1267	1011	1446	2560	1983	579	234	528	270	133	18	182	223	61	0	0	0	0	0	0	0	0	56	<b>10551</b>
<b>TOIMI UPLANDS</b>	269	310	199	337	169	52	21	21	0	19	0	0	2	0	0	0	0	0	0	0	0	0	0	<b>1399</b>
TU under development	87	0	0	16	267	0	0	12	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>448</b>
Toimi Uplands Total	356	310	199	353	436	52	21	33	66	19	0	0	2	0	0	0	0	0	0	0	0	0	0	<b>1847</b>
	<b>3306</b>	<b>3407</b>	<b>4209</b>	<b>5255</b>	<b>3376</b>	<b>1070</b>	<b>457</b>	<b>709</b>	<b>737</b>	<b>358</b>	<b>146</b>	<b>257</b>	<b>289</b>	<b>76</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>23712</b>	

**Figure 4.17. 2014 White spruce age-class distribution**

The following seven charts display the age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the cover type is located in each subsection.



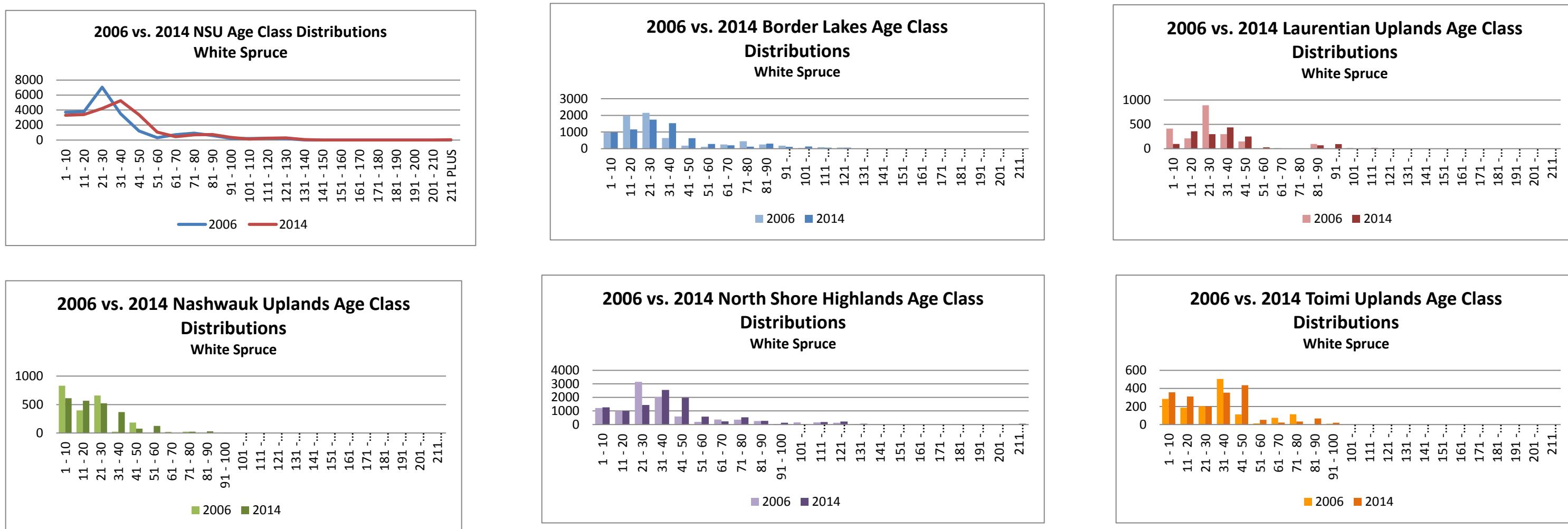
**Table 4.18. 2006 Age-class distribution of white spruce stands**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

White Spruce - 61	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	Total
BORDER LAKES	967	1971	2149	643	181	117	255	450	251	183	43	89	70	5	0	0	0	0	0	0	0	0	7374
LAURENTIAN UPLANDS	414	211	894	297	149	0	9	0	97	0	13	0	0	0	0	0	0	0	0	0	0	0	2084
NASHWAUK UPLANDS	833	398	660	25	184	0	20	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2143
NORTH SHORE HIGHLANDS	1216	1009	3151	2043	596	199	368	350	255	30	155	155	130	16	0	0	0	0	0	0	0	0	9673
TOIMI UPLANDS	284	186	203	505	112	13	74	114	0	8	0	0	0	0	0	0	0	0	0	0	0	0	1499
	<b>3714</b>	<b>3775</b>	<b>7057</b>	<b>3513</b>	<b>1222</b>	<b>329</b>	<b>726</b>	<b>937</b>	<b>603</b>	<b>221</b>	<b>211</b>	<b>244</b>	<b>200</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>22773</b>						

**Figure 4.18. Comparison between 2006 and current (2014) age-class distributions for white spruce stands**

A line graph displays the age-class distribution of all commercial cover types combined for the section as a whole; five individual bar charts display the age-class distribution of all commercial cover types combined for the individual subsections that make up the NSU.



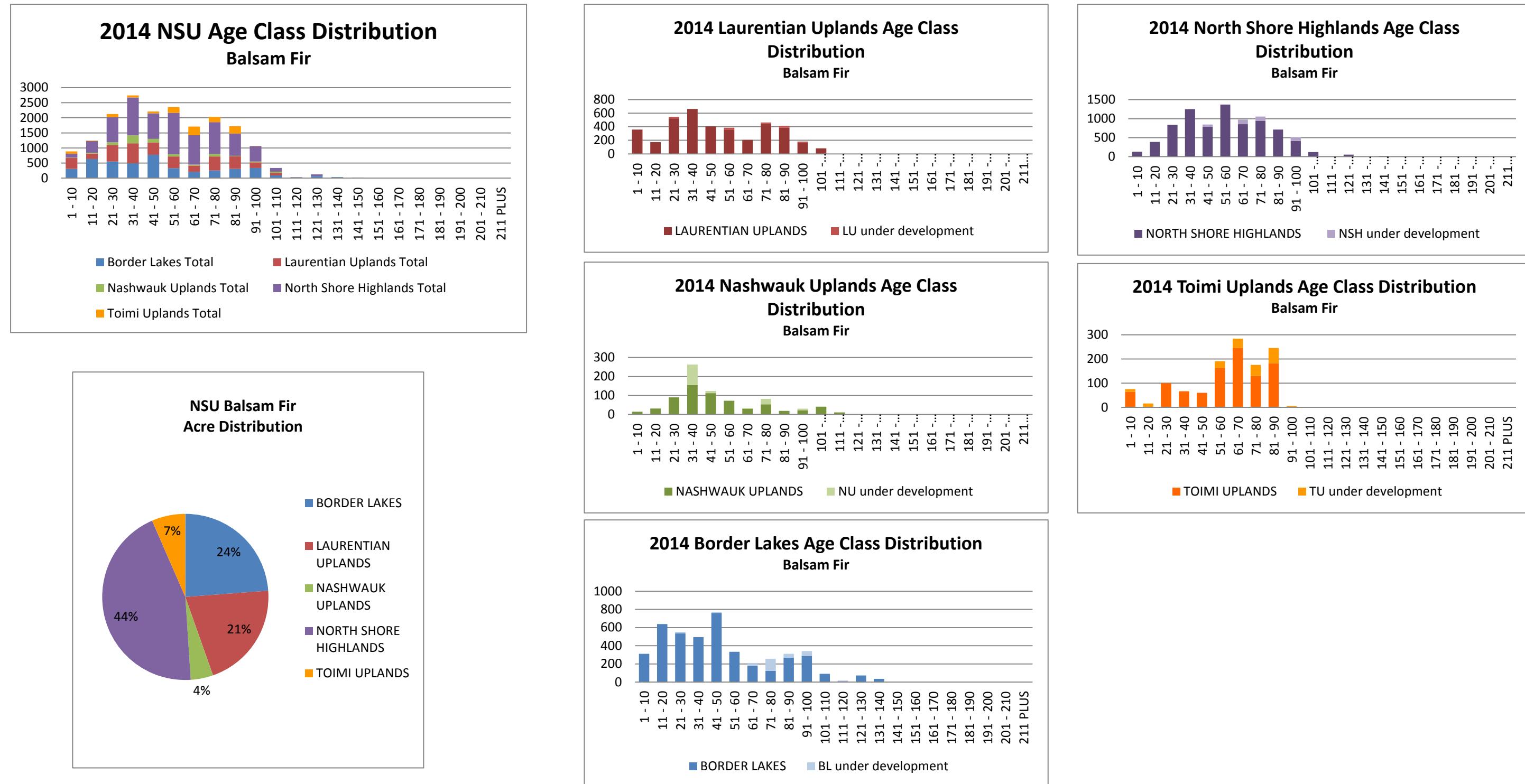
**Table 4.19. 2014 Balsam fir age-class distribution by ten-year age class**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

Balsam Fir - 62	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	TOTAL	
<b>BORDER LAKES</b>	311	638	537	495	761	334	174	122	270	289	88	9	72	35	0	0	0	0	0	0	0	0	0	<b>4135</b>
BL under development	0	0	15	0	12	0	37	134	41	52	6	7	0	0	0	0	0	0	0	0	0	0	0	<b>304</b>
Border Lakes Total	311	638	552	495	773	334	211	256	311	341	94	16	72	35	0	0	0	0	0	0	0	0	0	<b>4439</b>
<b>LAURENTIAN UPLANDS</b>	358	174	524	663	406	353	207	443	385	172	80	0	0	0	0	0	0	0	0	0	0	0	0	<b>3765</b>
LU under development	0	0	22	0	0	33	0	21	29	9	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>114</b>
Laurentian Uplands Total	358	174	546	663	406	386	207	464	414	181	80	0	0	0	0	0	0	0	0	0	0	0	0	<b>3879</b>
<b>NASHWAUK UPLANDS</b>	14	31	90	155	112	72	30	54	19	22	41	11	0	0	0	0	0	0	0	0	0	0	0	<b>651</b>
NU under development	0	0	0	108	12	0	4	28	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>160</b>
Nashwauk Uplands Total	14	31	90	263	124	72	34	82	19	30	41	11	0	0	0	0	0	0	0	0	0	0	0	<b>811</b>
<b>NORTH SHORE HIGHLANDS</b>	128	387	840	1253	794	1374	854	940	705	413	121	7	52	0	18	0	0	0	0	0	0	0	0	<b>7886</b>
NSH under development	0	0	0	0	54	0	122	115	27	96	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>414</b>
North Shore Highlands Total	128	387	840	1253	848	1374	976	1055	732	509	121	7	52	0	18	0	0	0	0	0	0	0	0	<b>8300</b>
<b>TOIMI UPLANDS</b>	64	0	100	66	60	163	245	130	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>1010</b>
TU under development	11	16	0	0	0	28	39	45	63	5	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>207</b>
Toimi Uplands Total	75	16	100	66	60	191	284	175	245	5	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>1217</b>
	<b>886</b>	<b>1246</b>	<b>2128</b>	<b>2740</b>	<b>2211</b>	<b>2357</b>	<b>1712</b>	<b>2032</b>	<b>1721</b>	<b>1066</b>	<b>336</b>	<b>34</b>	<b>124</b>	<b>35</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18646</b>

**Figure 4.19. 2014 Balsam fir age-class distribution**

The following seven charts display the age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the cover type is located in each subsection



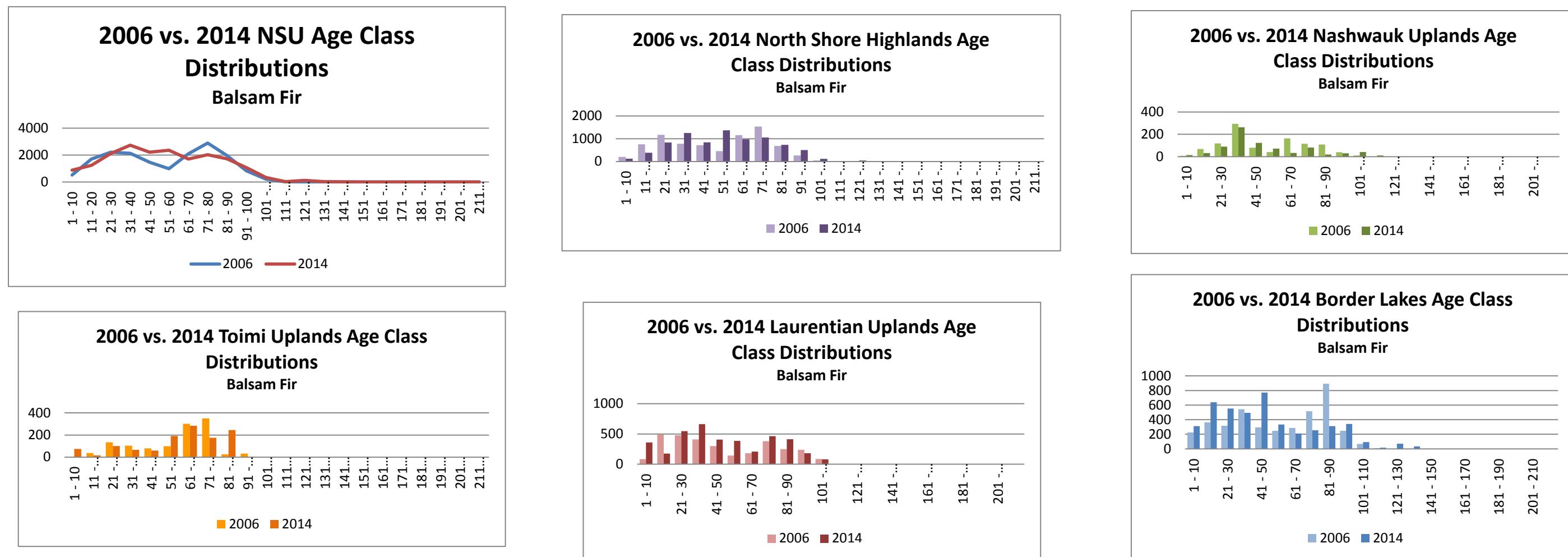
**Table 4.20. 2006 Balsam fir age-class distribution by subsection and ten-year age class**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

Balsam Fir - 62	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	Total
BORDER LAKES	226	363	316	543	295	247	288	517	892	248	69	10	0	0	0	0	0	0	0	0	0	0	4014
LAURENTIAN UPLANDS	84	492	477	409	300	142	182	379	249	236	85	0	0	0	0	0	0	0	0	0	0	0	3035
NASHWAUK UPLANDS	7	68	118	294	80	41	164	115	109	40	11	0	0	0	0	0	0	0	0	0	0	0	1047
NORTH SHORE HIGHLANDS	210	756	1176	784	717	462	1161	1539	684	270	47	7	12	0	0	0	0	0	0	0	0	0	7825
TOIMI UPLANDS	0	37	134	104	80	98	302	350	26	33	0	0	0	0	0	0	0	0	0	0	0	0	1164
	527	1716	2221	2134	1472	990	2097	2900	1960	827	212	17	12	0	0	0	0	0	0	0	0	0	17085

**Figure 4.20. Comparison between 2006 and current (2014) age-class distribution of balsam fir stands**

A line graph displays the age-class distribution of balsam fir cover type for the section as a whole; five individual bar charts display the age-class distribution of balsam fir stands for the individual subsections that make up the NSU.



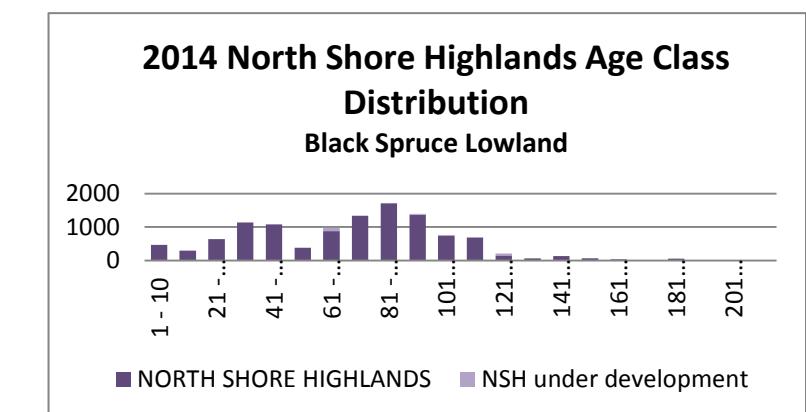
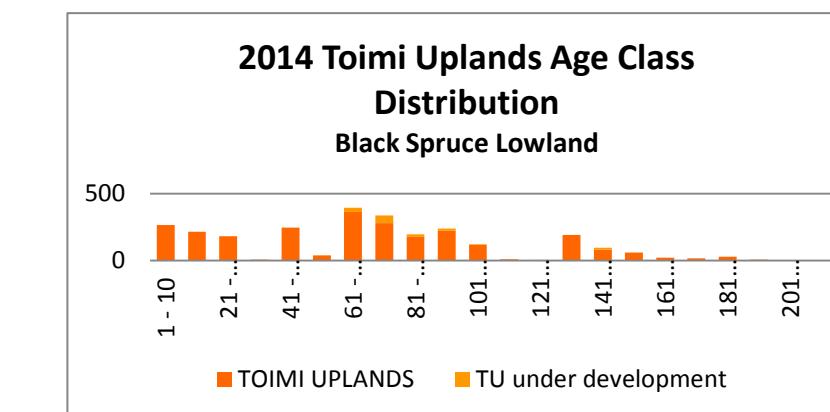
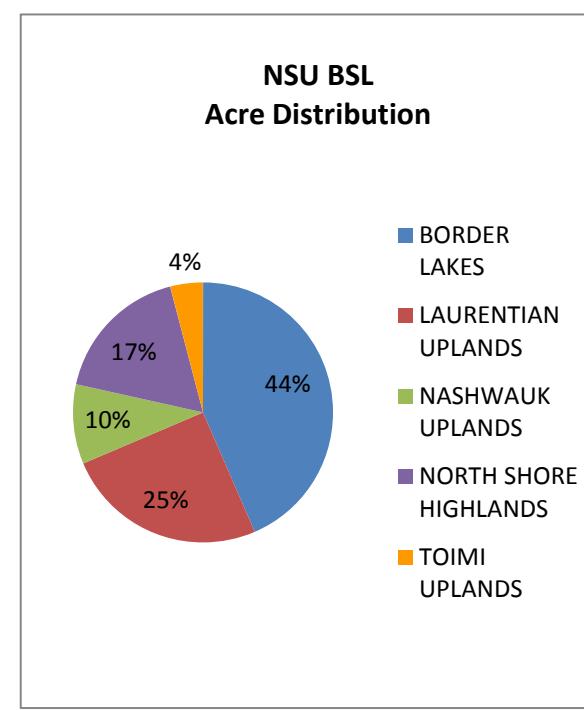
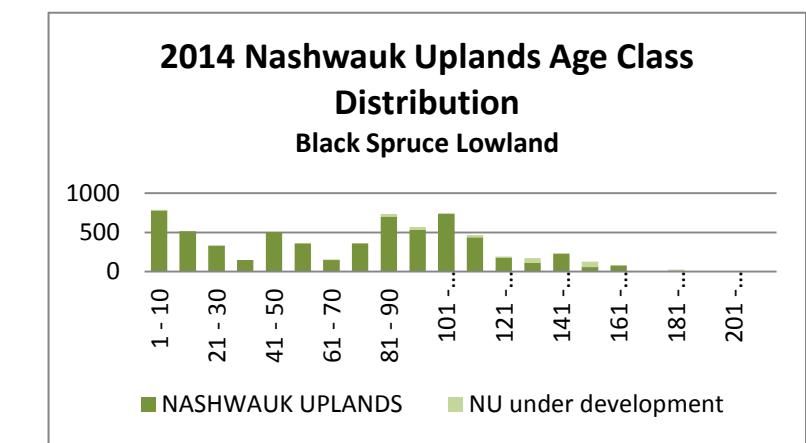
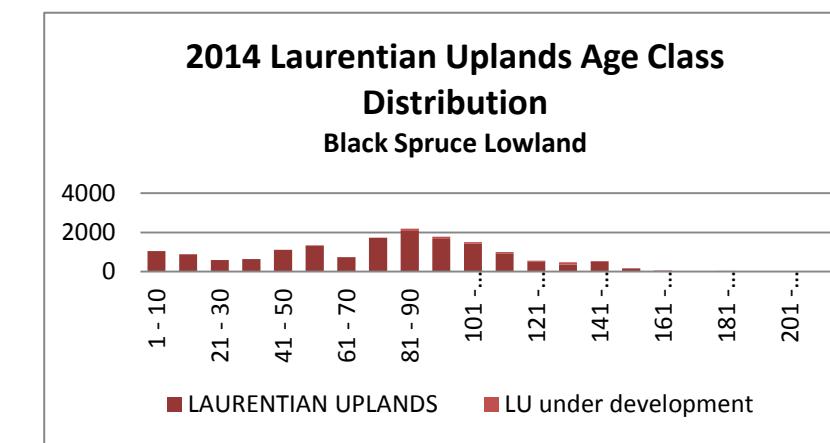
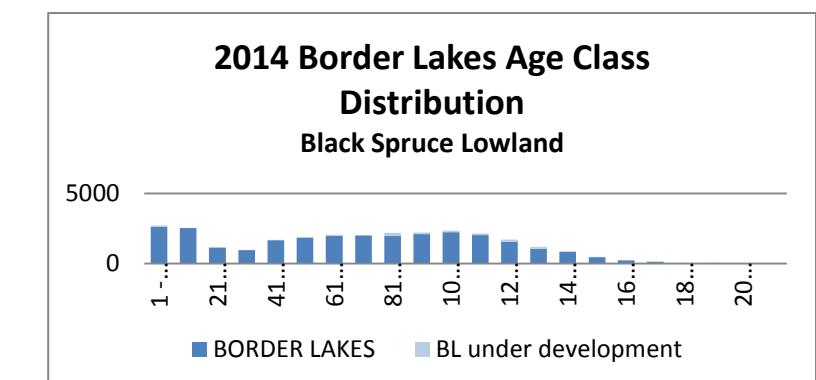
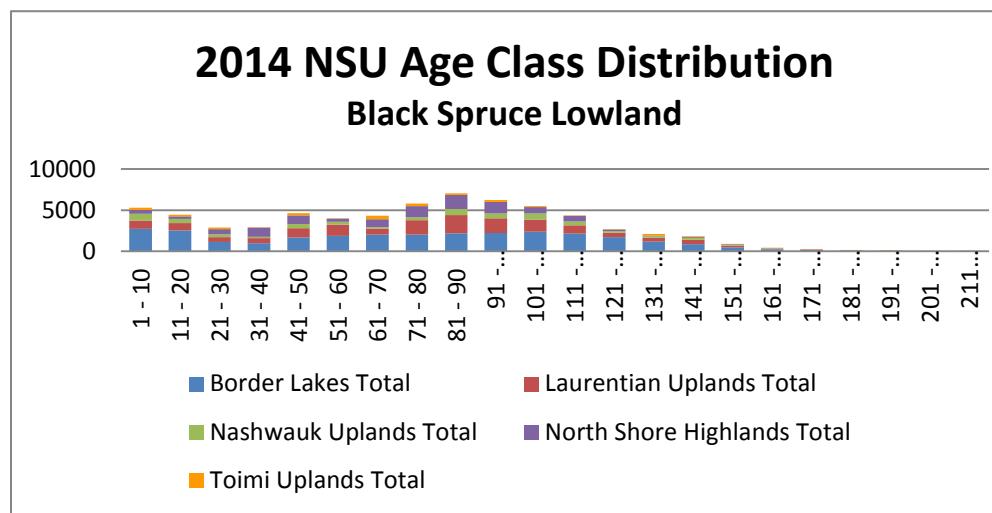
**Table 4.21. 2014 Lowland black spruce age-class distribution by ten-year age class**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

Black Spruce Lowland - 71	<b>1 - 10</b>	<b>11 - 20</b>	<b>21 - 30</b>	<b>31 - 40</b>	<b>41 - 50</b>	<b>51 - 60</b>	<b>61 - 70</b>	<b>71 - 80</b>	<b>81 - 90</b>	<b>91 - 100</b>	<b>101 - 110</b>	<b>111 - 120</b>	<b>121 - 130</b>	<b>131 - 140</b>	<b>141 - 150</b>	<b>151 - 160</b>	<b>161 - 170</b>	<b>171 - 180</b>	<b>181 - 190</b>	<b>191 - 200</b>	<b>201 - 210</b>	<b>211 PLUS</b>	<b>TOTAL</b>
<b>BORDER LAKES</b>	2626	2537	1141	963	1675	1815	1985	1997	1963	2088	2236	2040	1554	1048	834	447	224	114	23	29	0	0	<b>27339</b>
BL under development	89	0	0	0	6	67	61	42	238	130	125	108	152	125	25	32	0	43	2	0	0	0	<b>1245</b>
Border Lakes Total	2715	2537	1141	963	1681	1882	2046	2039	2201	2218	2361	2148	1706	1173	859	479	224	157	25	29	0	0	<b>28584</b>
<b>LAURENTIAN UPLANDS</b>	1043	880	594	647	1109	1309	734	1717	2074	1672	1428	936	534	368	523	177	52	29	36	11	19	11	<b>15903</b>
LU under development	0	0	0	0	0	38	0	15	127	120	80	65	21	113	15	0	0	0	0	0	0	0	<b>594</b>
Laurentian Uplands Total	1043	880	594	647	1109	1347	734	1732	2201	1792	1508	1001	555	481	538	177	52	29	36	11	19	11	<b>16497</b>
<b>NASHWAUK UPLANDS</b>	781	517	331	147	505	360	149	361	702	530	742	440	180	110	228	57	77	0	0	0	0	0	<b>6217</b>
NU under development	8	0	0	0	0	0	9	0	33	38	0	27	13	63	3	72	0	0	25	0	0	0	<b>291</b>
Nashwauk Uplands Total	789	517	331	147	505	360	158	361	735	568	742	467	193	173	231	129	77	0	25	0	0	0	<b>6508</b>
<b>NORTH SHORE HIGHLANDS</b>	470	294	642	1141	1079	381	880	1344	1713	1365	737	684	149	62	128	66	33	9	50	0	0	3	<b>11230</b>
NSH under development	0	0	0	0	0	0	91	0	13	35	24	11	59	12	0	0	0	0	0	0	0	0	<b>245</b>
North Shore Highlands Total	470	294	642	1141	1079	381	971	1344	1726	1400	761	695	208	74	128	66	33	9	50	0	0	3	<b>11475</b>
<b>TOIMI UPLANDS</b>	265	216	182	7	247	37	365	279	177	222	117	10	3	190	80	60	21	16	28	6	0	0	<b>2528</b>
TU under development	0	0	0	0	0	2	31	59	18	17	5	0	0	0	14	0	0	0	0	0	0	0	<b>146</b>
Toimi Uplands Total	265	216	182	7	247	39	396	338	195	239	122	10	3	190	94	60	21	16	28	6	0	0	<b>2674</b>
	<b>5282</b>	<b>4444</b>	<b>2890</b>	<b>2905</b>	<b>4621</b>	<b>4009</b>	<b>4305</b>	<b>5814</b>	<b>7058</b>	<b>6217</b>	<b>5494</b>	<b>4321</b>	<b>2665</b>	<b>2091</b>	<b>1850</b>	<b>911</b>	<b>407</b>	<b>211</b>	<b>164</b>	<b>46</b>	<b>19</b>	<b>14</b>	<b>65738</b>

### Figure 4.21. 2014 Lowland black spruce age-class distribution

The following seven charts display the age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the cover type is located in each subsection



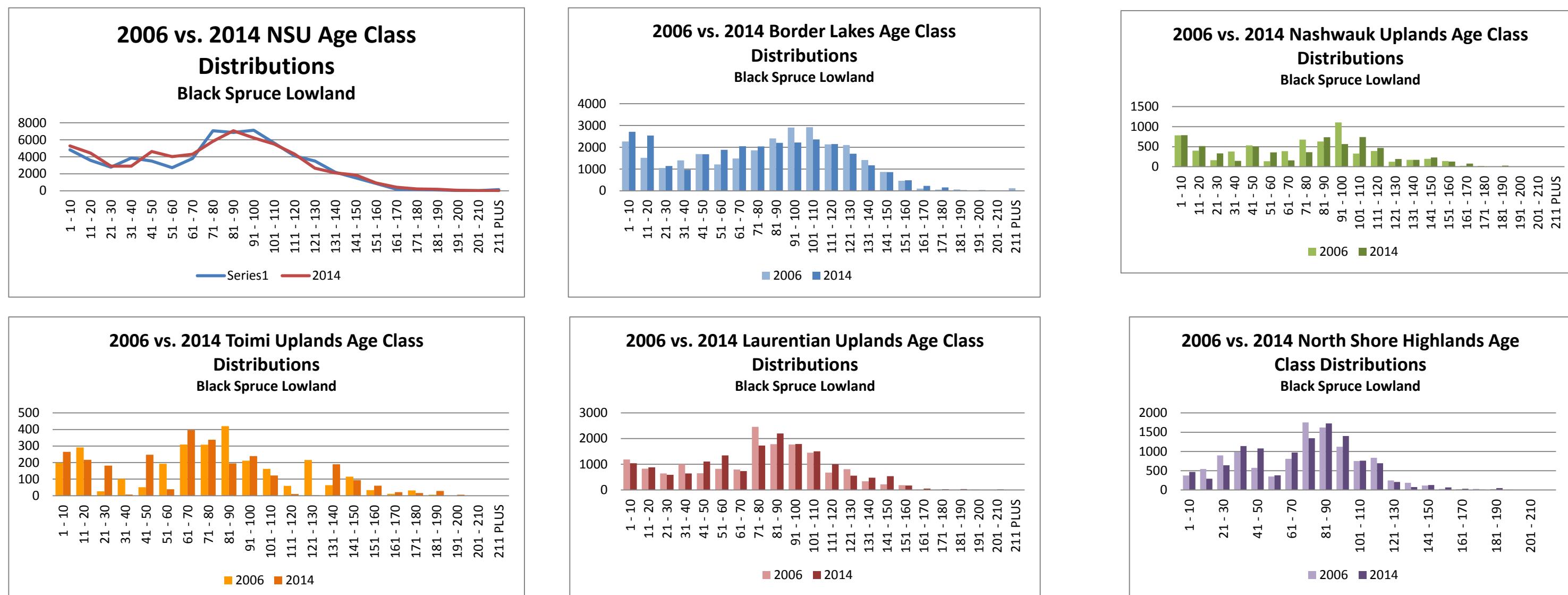
**Table 4.22. 2006 Age-class distribution of lowland black spruce by subsection and ten-year age class**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

Black Spruce Lowland - 71	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	Total
BORDER LAKES	2268	1516	1042	1394	1683	1207	1484	1862	2404	2908	2922	2133	2105	1413	866	456	98	54	56	7	0	114	27992
LAURENTIAN UPLANDS	1185	832	642	1002	650	824	796	2460	1786	1769	1450	674	808	337	219	186	16	17	8	18	0	11	15690
NASHWAUK UPLANDS	784	400	161	381	533	139	388	675	631	1107	329	391	126	169	195	142	24	19	0	0	0	0	6594
NORTH SHORE HIGHLANDS	378	546	897	984	573	352	811	1755	1623	1122	751	837	250	187	118	29	19	29	25	9	3	0	11298
TOIMI UPLANDS	198	292	26	101	51	193	309	308	420	211	162	59	215	63	115	33	11	31	6	0	0	0	2804
	<b>4813</b>	<b>3586</b>	<b>2768</b>	<b>3862</b>	<b>3490</b>	<b>2715</b>	<b>3788</b>	<b>7060</b>	<b>6864</b>	<b>7117</b>	<b>5614</b>	<b>4094</b>	<b>3504</b>	<b>2169</b>	<b>1513</b>	<b>846</b>	<b>168</b>	<b>150</b>	<b>95</b>	<b>34</b>	<b>3</b>	<b>125</b>	<b>64378</b>

**Figure 4.22. Comparison between 2006 and current (2014) age-class distribution of lowland black spruce stands**

A line graph displays the age-class distribution of lowland black spruce for the section as a whole; five individual bar charts display the age-class distribution of the cover type for the individual subsections that make up the NSU



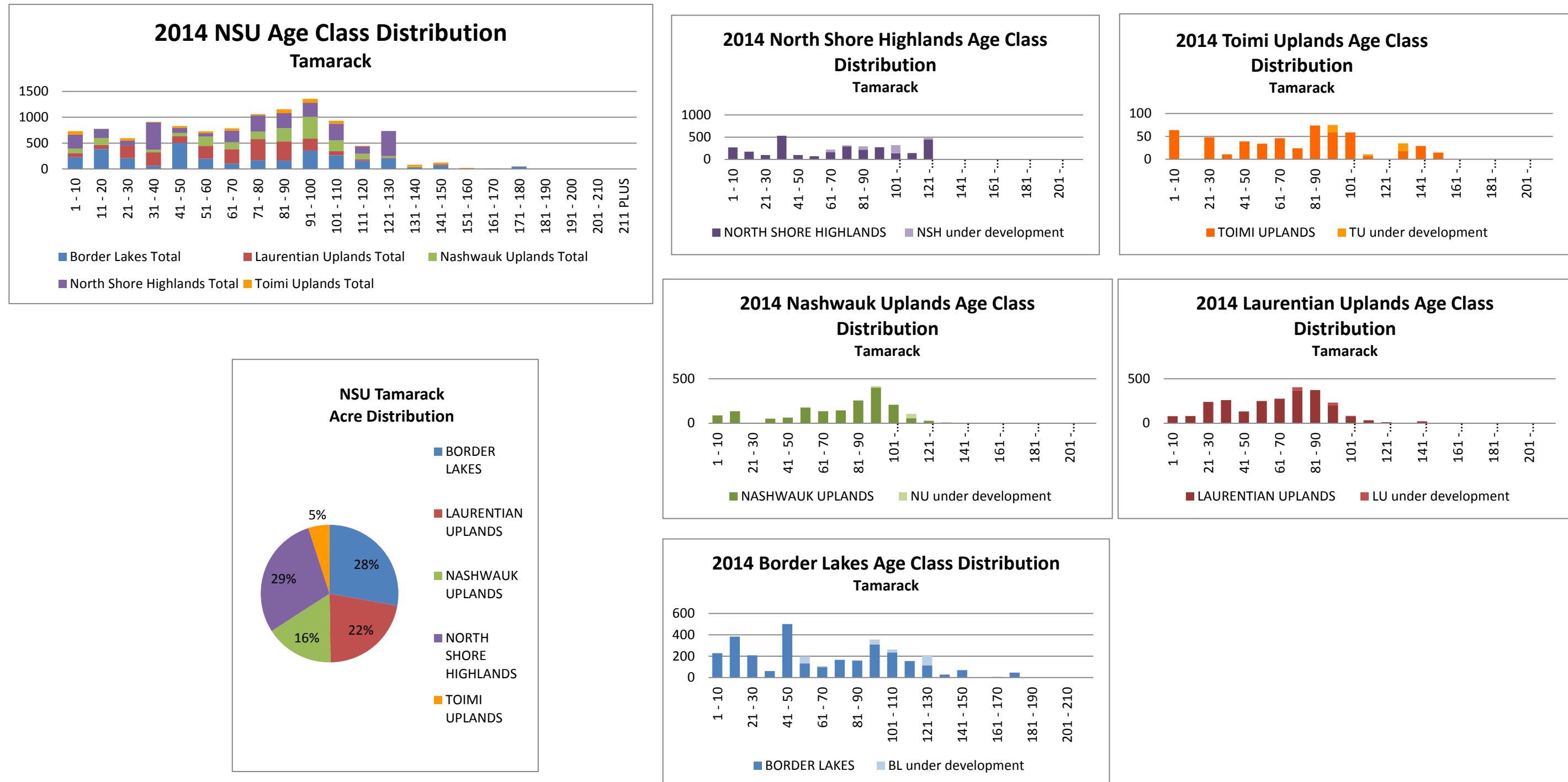
**Table 4.23. 2014 Tamarack age-class distribution by ten-year age class**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

Tamarack - 72	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	TOTAL
<b>BORDER LAKES</b>	228	384	209	61	501	133	100	166	158	309	235	154	113	29	69	0	0	46	0	0	0	0	<b>2895</b>
BL under development	0	0	0	0	0	66	7	5	1	47	28	2	97	0	0	0	8	0	0	0	0	0	<b>261</b>
Border Lakes Total	228	384	209	61	501	199	107	171	159	356	263	156	210	29	69	0	8	46	0	0	0	0	<b>3156</b>
<b>LAURENTIAN UPLANDS</b>	79	81	241	260	132	250	276	367	374	198	79	33	11	6	21	0	0	0	0	0	0	0	<b>2408</b>
LU under development	0	0	0	0	0	0	0	38	0	35	3	0	0	0	0	0	0	0	0	0	0	0	<b>76</b>
Laurentian Uplands Total	79	81	241	260	132	250	276	405	374	233	82	33	11	6	21	0	0	0	0	0	0	0	<b>2484</b>
<b>NASHWAUK UPLANDS</b>	86	134	0	52	63	176	134	144	255	401	208	58	27	0	5	0	0	0	0	0	0	0	<b>1743</b>
NU under development	4	0	0	0	0	0	0	0	0	17	2	46	0	11	0	0	0	0	0	0	0	0	<b>80</b>
Nashwauk Uplands Total	90	134	0	52	63	176	134	144	255	418	210	104	27	11	5	0	0	0	0	0	0	0	<b>1823</b>
<b>NORTH SHORE HIGHLANDS</b>	271	175	98	530	97	69	167	292	216	275	138	144	446	0	0	4	0	0	0	0	0	0	<b>2922</b>
NSH under development	0	0	0	0	0	0	56	24	77	0	182	0	40	0	0	0	0	0	0	0	0	0	<b>379</b>
North Shore Highlands Total	271	175	98	530	97	69	223	316	293	275	320	144	486	0	0	4	0	0	0	0	0	0	<b>3301</b>
<b>TOIMI UPLANDS</b>	64	0	48	11	39	34	46	24	74	59	59	7	0	18	29	15	0	0	0	0	0	0	<b>527</b>
TU under development	0	0	0	0	0	0	0	0	0	16	0	4	0	17	0	0	0	0	0	0	0	0	<b>37</b>
Toimi Uplands Total	64	0	48	11	39	34	46	24	74	75	59	11	0	35	29	15	0	0	0	0	0	0	<b>564</b>
	<b>732</b>	<b>774</b>	<b>596</b>	<b>914</b>	<b>832</b>	<b>728</b>	<b>786</b>	<b>1060</b>	<b>1155</b>	<b>1357</b>	<b>934</b>	<b>448</b>	<b>734</b>	<b>81</b>	<b>124</b>	<b>19</b>	<b>8</b>	<b>46</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11328</b>

### Figure 4.23. 2014 Tamarack age-class distribution

The following seven charts display the age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the cover type is located in each subsection



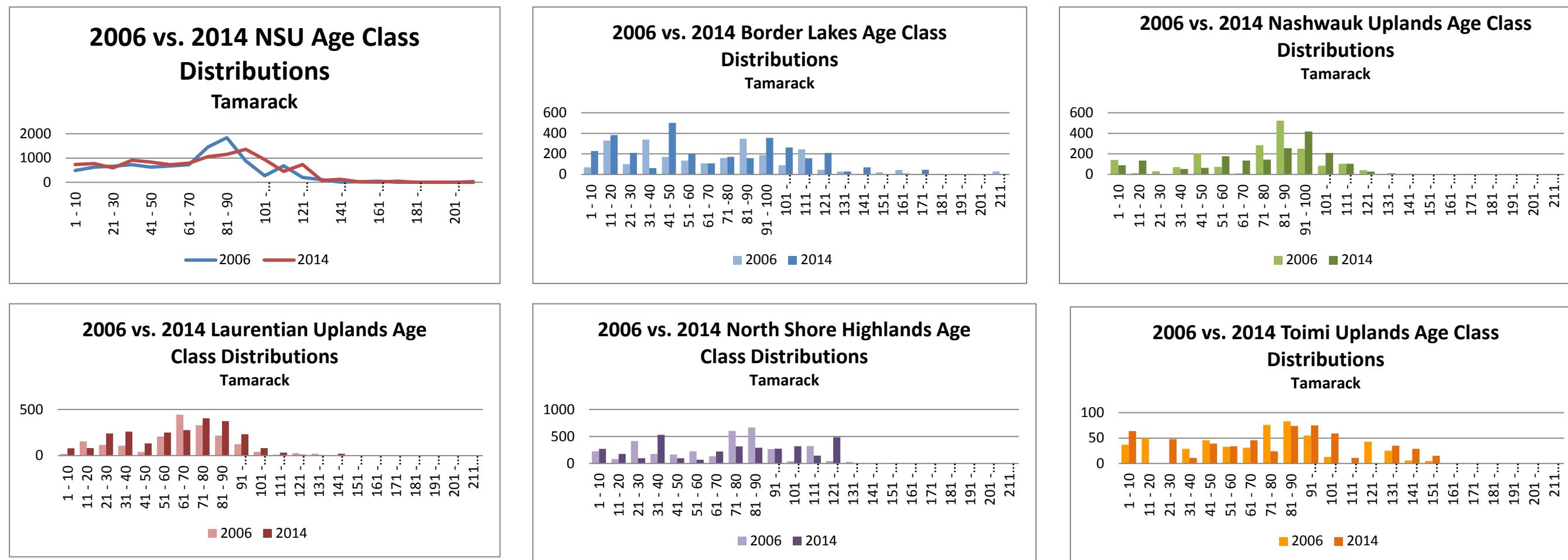
**Table 4.24. 2006 Tamarack age-class distribution by subsection and ten-year age class**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

Tamarack - 72	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180
BORDER LAKES	69	331	101	339	170	134	108	160	347	188	89	245	45	28	0	19	44	0
LAURENTIAN UPLANDS	19	154	116	107	40	208	444	329	217	125	40	11	27	21	0	0	0	0
NASHWAUK UPLANDS	140	12	30	71	205	72	10	284	524	249	85	103	41	6	0	0	0	0
NORTH SHORE HIGHLANDS	226	81	415	177	166	224	135	604	667	267	41	324	44	26	3	0	0	0
TOIMI UPLANDS	37	50	0	29	46	33	31	76	83	55	13	0	43	25	6	5	0	0
	<b>491</b>	<b>628</b>	<b>662</b>	<b>723</b>	<b>627</b>	<b>671</b>	<b>728</b>	<b>1453</b>	<b>1838</b>	<b>884</b>	<b>268</b>	<b>683</b>	<b>200</b>	<b>106</b>	<b>9</b>	<b>24</b>	<b>44</b>	<b>0</b>

**Figure 4.24. Comparison between 2006 and current (2014) age-class distributions tamarack stands**

A line graph displays the age-class distribution of tamarack cover type for the section as a whole; five individual bar charts display the age-class distribution of tamarack stands for the individual subsections that make up the NSU.



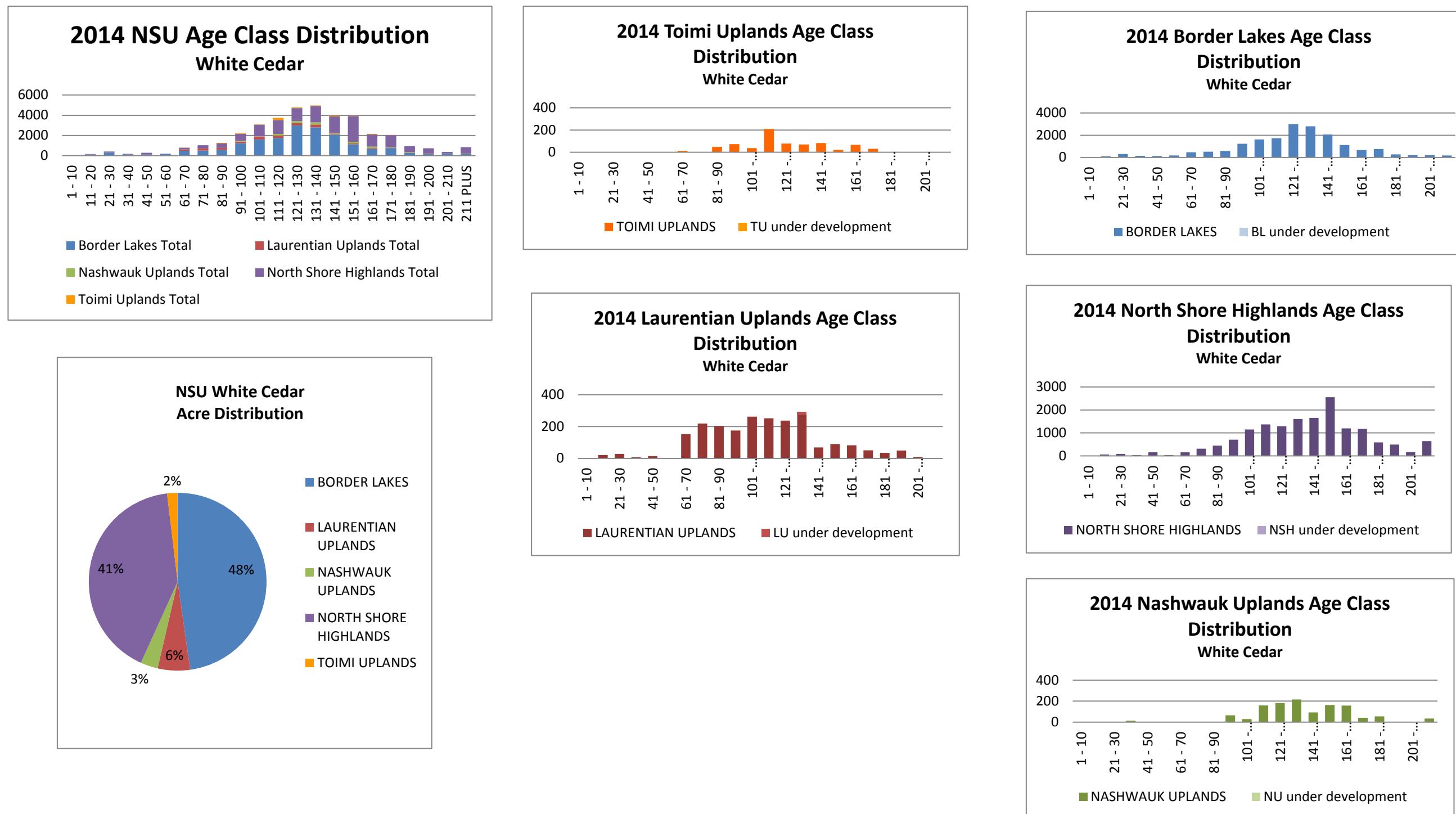
**Table 4.25. 2014 White cedar age-class distribution by ten-year age class**

The first column lists the subsections (stands that are under development are displayed separately under each); remaining columns are acres by ten-year age class. Totals acreages are given for each age class, and each subsection.

White Cedar - 73	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 PLUS	TOTAL
<b>BORDER LAKES</b>	0	93	309	144	125	183	458	508	578	1228	1615	1721	2995	2796	2065	1121	667	763	278	203	207	173	<b>18230</b>
BL under development	0	0	0	0	0	0	25	0	0	0	0	32	1	0	0	0	0	0	0	0	0	0	<b>58</b>
Border Lakes Total	0	93	309	144	125	183	483	508	578	1228	1615	1753	2996	2796	2065	1121	667	763	278	203	207	173	<b>18288</b>
<b>LAURENTIAN UPLANDS</b>	0	21	28	7	15	0	153	219	203	175	262	252	238	276	69	90	82	51	35	50	9	0	<b>2235</b>
LU under development	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	<b>15</b>
Laurentian Uplands Total	0	21	28	7	15	0	153	219	203	175	262	252	238	291	69	90	82	51	35	50	9	0	<b>2250</b>
<b>NASHWAUK UPLANDS</b>	0	0	0	13	0	0	0	0	0	65	29	159	182	217	93	163	157	40	54	0	0	33	<b>1205</b>
NU under development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Nashwauk Uplands Total	0	0	0	13	0	0	0	0	0	65	29	159	182	217	93	163	157	40	54	0	0	33	<b>1205</b>
<b>NORTH SHORE HIGHLANDS</b>	0	57	83	29	156	25	151	309	441	704	1153	1367	1289	1604	1650	2552	1195	1173	589	489	165	643	<b>15824</b>
NSH under development	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	<b>7</b>
North Shore Highlands Total	0	57	83	29	156	25	151	309	441	704	1160	1367	1289	1604	1650	2552	1195	1173	589	489	165	643	<b>15831</b>
<b>TOIMI UPLANDS</b>	0	0	0	0	0	0	13	0	49	72	37	209	78	70	83	20	67	31	0	0	0	0	<b>729</b>
TU under development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Toimi Uplands Total	0	0	0	0	0	0	13	0	49	72	37	209	78	70	83	20	67	31	0	0	0	0	<b>729</b>
	<b>0</b>	<b>171</b>	<b>420</b>	<b>193</b>	<b>296</b>	<b>208</b>	<b>800</b>	<b>1036</b>	<b>1271</b>	<b>2244</b>	<b>3103</b>	<b>3740</b>	<b>4783</b>	<b>4978</b>	<b>3960</b>	<b>3946</b>	<b>2168</b>	<b>2058</b>	<b>956</b>	<b>742</b>	<b>381</b>	<b>849</b>	<b>38303</b>

### Figure 4.25. 2014 White cedar age-class distribution

The following seven charts display the age-class distribution data graphically. One chart shows data for the combined subsections in bar chart format; five bar charts display the individual subsection data; and a pie chart displays the data for the section as a whole, showing how much of the cover type is located in each subsection



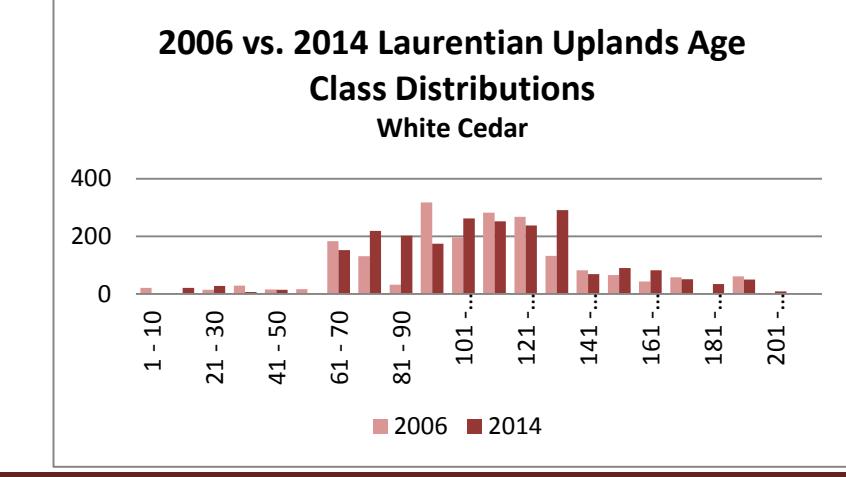
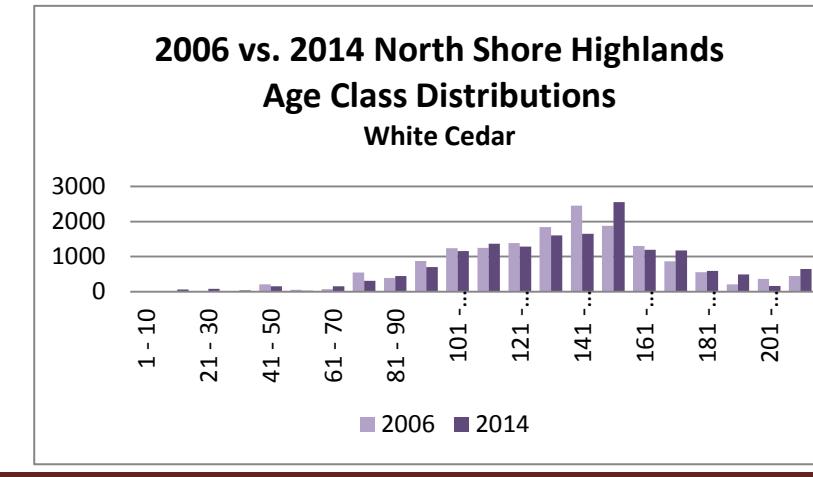
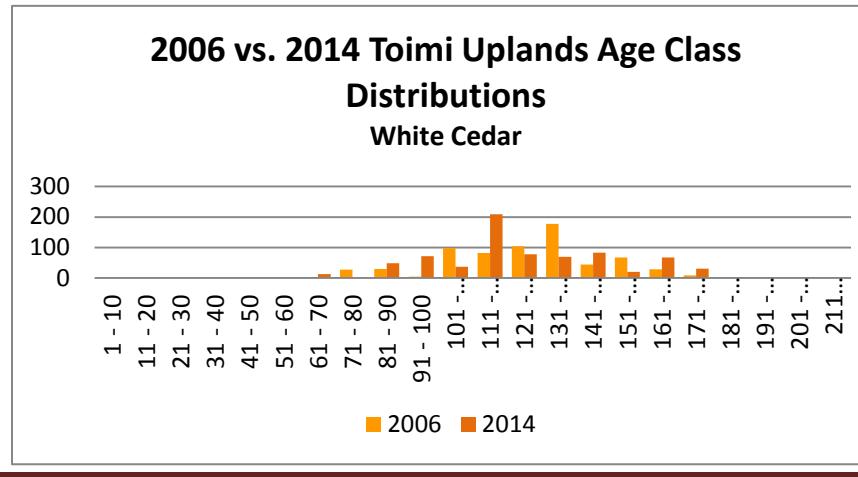
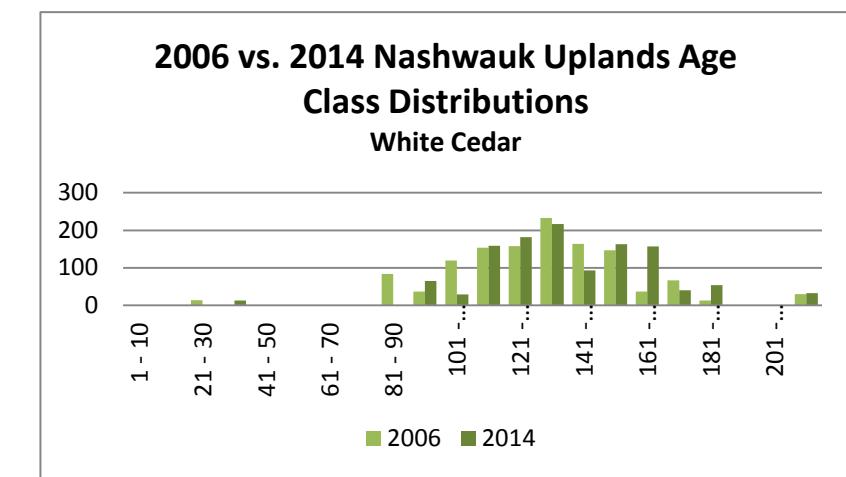
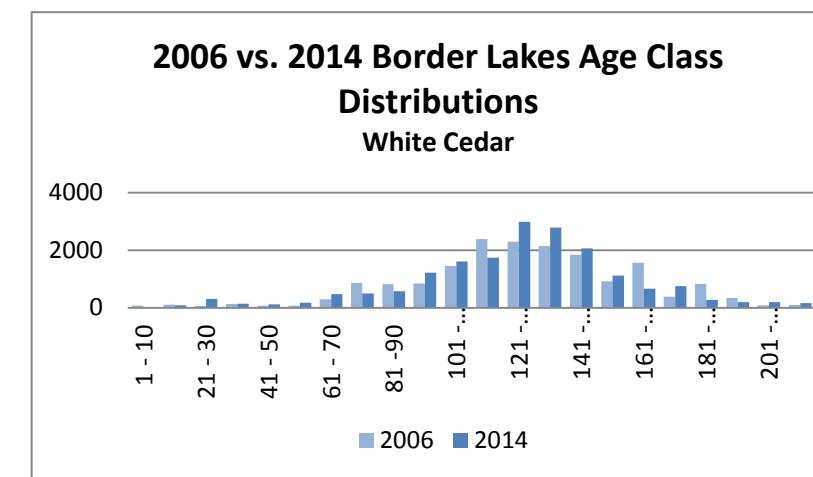
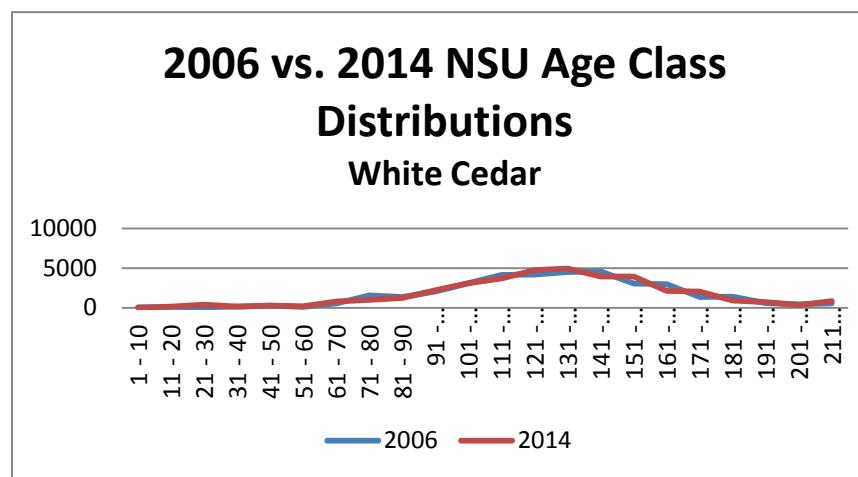
**Table 4.26. 2006 White cedar age-class distribution by subsection**

The first column lists the subsections; subsequent columns are for each ten-year age class. Totals are given for each age class and subsection.

White Cedar - 73	1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100	101 - 110	111 - 120	121 - 130	131 - 140	141 - 150	151 - 160	161 - 170	171 - 180	181 - 190	191 - 200	201 - 210	211 - PLUS	Total
BORDER LAKES	80	114	73	137	85	83	305	869	826	853	1463	2391	2301	2144	1845	930	1573	390	835	352	94	103	17846
LAURENTIAN UPLANDS	21	0	15	29	16	17	184	131	33	318	197	282	268	132	83	66	44	58	0	61	0	0	1955
NASHWAUK UPLANDS	0	0	14	0	0	0	0	0	84	37	120	154	158	233	164	147	37	67	13	0	0	30	1258
NORTH SHORE HIGHLANDS	0	18	0	16	208	52	74	546	393	871	1235	1245	1388	1841	2451	1883	1299	866	557	209	365	447	15964
TOIMI UPLANDS	0	0	0	0	0	0	0	28	30	5	98	82	104	178	44	68	29	9	0	0	0	0	675
	<b>101</b>	<b>132</b>	<b>102</b>	<b>182</b>	<b>309</b>	<b>152</b>	<b>563</b>	<b>1574</b>	<b>1366</b>	<b>2084</b>	<b>3113</b>	<b>4154</b>	<b>4219</b>	<b>4528</b>	<b>4587</b>	<b>3094</b>	<b>2982</b>	<b>1390</b>	<b>1405</b>	<b>622</b>	<b>459</b>	<b>580</b>	<b>37698</b>

**Figure 4.26. Comparison between year 2006 and current (2014) white cedar age-class distribution**

A line graph displays the age-class distribution of the white cedar covertype for the section as a whole; five individual bar charts display the age-class distribution of white cedar stands for the individual subsections that make up the NSU.



## Old-Growth Forest

Minnesota DNR's old-growth forest management goal is to identify and protect the highest quality remaining old-growth forest communities on state-administered lands. DNR old-growth policy allows for the establishment of old-growth in other lowland forest types including black spruce, tamarack and cedar. A process to identify and designate old growth lowland conifers (LCOG) is currently underway. This process is not finalized or available for inclusion in the current NSU Assessment.

Old-growth forest stands are defined by age, structural characteristics, size, landscape context, and degree of human disturbance. These forests are essentially free from recent catastrophic disturbances and contain old trees (>120 years old generally), snags, and downed trees. DNR old-growth identification methods distinguish between two types of old-growth forest: Type I (primary, natural origin forest without any evidence of timber harvest) and Type II (forests >120 years old but with evidence of some past timber harvest).

Old-growth forest represents the latter stages of succession in forested ecosystems. Remaining old-growth forests are important for their scientific and educational values, as well as their aesthetic and spiritual appeal. Old-growth forests provide special habitats for native plants, important features for wildlife, and examples of the maximum limits of individual tree and stand production. Because old-growth forests developed for a long time without catastrophic disturbance, the study of plants, animals, soils and ecosystem processes in old-growth forests provides important insights into the natural function of these forests. Such insights can be crucial for understanding the influences of management on forest systems (i.e. reference sites) and for biodiversity conservation.

The original DNR old-growth designations occurred between 1994 and about 2003. DNR old-growth policy allows for adding to the designated pool of stands and delisting existing designated stands. To-date there have been very few adjustments to the old-growth network since the original designation process was completed. However, DNR staff in the Northeast Region are currently reviewing a number of nominations for addition to the old-growth network along with a number of nominations to delist existing designated stands. DNR intends to complete this process within the planning timeframe of the NSU SFRMP.

**Table 4.27. Designated old-growth forest by NSU subsection**

Columns in this table show acres of designated old-growth forest by forest cover type on DNR lands in the Northern Superior Uplands subsections covered in this plan. The total number of acres of designated old-growth forest is 15,890. The largest number of acres is in the northern hardwoods cover type.

Covertype	Designated Old-Growth Forest by NSU Subsection					
	Border Lakes	Laurentian Uplands	Nashwauk Uplands	North Shore Highlands	Toimi Uplands	NSU Total
Ash	173	0	116	110	0	399
Cedar	516	17	30	2,494	7	3,064
Lowland Hardwoods	338	0	0	24	34	396
Northern Hardwoods	81	0	137	3,909	264	4,391
Oak	0	0	0	132	0	132
Red Pine	2,367	293	287	63	113	3,123
White Pine	3,317	297	0	189	76	3,879
White Spruce	110	123	0	273	0	506
<b>Total</b>	<b>6,902</b>	<b>730</b>	<b>570</b>	<b>7,194</b>	<b>494</b>	<b>15,890</b>

**Figure 4.27. Designated old-growth forest by NSU Subsection**

This chart is a graphical representation of data in the previous table. Chart bars for each of the five subsections are grouped by forest cover type to show acres by cover type and subsection.

