

Complete Population of All Trees

9/5/2013

Species	DBH Class (in)									Total Standard Error
	0-3	3-6	6-12	12-18	18-24	24-30	30-36	36-42	> 42	
Broadleaf Deciduous Large (BDL)										
Maple	7	233	411	469	327	218	110	35	64	1,875 (±200)
White oak	0	7	68	124	169	216	146	65	22	818 (±250)
Northern red oak	0	3	67	173	144	81	16	4	4	492 (±295)
Oak	0	4	20	33	81	136	140	41	4	459 (±146)
Elm	3	64	66	78	34	41	19	5	8	318 (±52)
Northern hackberry	0	5	44	73	46	5	0	5	0	179 (±51)
Basswood	0	14	74	48	20	4	0	0	5	165 (±44)
Cottonwood	4	8	8	14	26	36	14	16	37	162 (±61)
Quaking aspen	0	40	52	16	0	0	0	0	0	108 (±43)
Eastern cottonwood	0	10	35	10	0	0	0	0	0	54 (±42)
Northern catalpa	0	3	10	8	15	0	0	0	0	37 (±20)
Black walnut	0	0	12	10	4	0	0	0	0	26 (±10)
Broadleaf Deciduous Large	0	0	3	4	0	0	0	0	0	7 (±5)
Hickory	0	0	0	3	0	0	0	0	0	3 (±3)
American sycamore	0	3	0	0	0	0	0	0	0	3 (±3)
Total	15	394	871	1,064	866	738	444	171	146	4,707 (±462)
Broadleaf Deciduous Medium (BDM)										
Ash	7	88	641	444	231	67	20	10	3	1,512 (±209)
Boxelder	0	7	163	162	64	44	29	8	4	481 (±169)
Birch	0	15	83	54	25	20	4	0	0	200 (±33)
Honeylocust	0	16	77	27	13	3	4	0	4	144 (±33)
Black locust	0	0	12	60	40	9	0	4	0	125 (±80)
Broadleaf Deciduous Medium	8	10	30	24	0	3	0	0	0	75 (±20)
Willow	0	4	26	0	8	0	7	9	8	63 (±22)
River birch	0	7	26	18	0	0	0	0	0	50 (±30)
Ohio buckeye	0	0	4	0	0	0	0	0	0	4 (±3)
Total	15	147	1,061	789	382	146	64	32	19	2,654 (±375)
Broadleaf Deciduous Small (BDS)										
Apple	0	210	418	137	40	9	0	0	0	814 (±72)
Black cherry	0	27	16	18	0	0	0	0	0	61 (±19)
Mountain ash	0	18	24	3	0	0	0	0	0	45 (±12)
Broadleaf Deciduous Small	0	12	18	0	0	0	0	0	0	30 (±10)
Japanese tree lilac	0	3	0	0	0	0	0	0	0	3 (±3)
Total	0	270	476	158	40	9	0	0	0	954 (±78)
Broadleaf Evergreen Large (BEL)										
Broadleaf Evergreen Large	0	0	0	0	3	0	0	0	0	3 (±3)
Total	0	0	0	0	3	0	0	0	0	3 (±3)
Broadleaf Evergreen Medium (BEM)										
Broadleaf Evergreen Medium	0	0	5	7	0	3	0	0	0	16 (±7)
Total	0	0	5	7	0	3	0	0	0	16 (±7)
Broadleaf Evergreen Small (BES)										
Broadleaf Evergreen Small	0	10	10	0	0	0	0	0	0	20 (±14)
Total	0	10	10	0	0	0	0	0	0	20 (±14)
Conifer Evergreen Large (CEL)										
Spruce	15	136	765	681	158	12	4	0	0	1,770 (±239)
Red pine	15	25	421	799	170	11	0	0	0	1,441 (±451)
Eastern white pine	0	22	43	121	136	40	12	0	0	374 (±142)
Northern white cedar	0	0	55	36	26	26	5	0	0	147 (±118)
Scotch pine	0	0	4	4	0	0	0	0	0	9 (±8)
spruce	0	0	0	5	0	0	0	0	0	5 (±5)
Total	31	183	1,288	1,646	489	89	22	0	0	3,747 (±708)
Conifer Evergreen Medium (CEM)										
Blue spruce	0	50	105	56	9	3	0	0	0	224 (±80)
Total	0	50	105	56	9	3	0	0	0	224 (±80)
Conifer Evergreen Small (CES)										
Eastern red cedar	0	3	47	83	8	7	0	0	0	148 (±28)

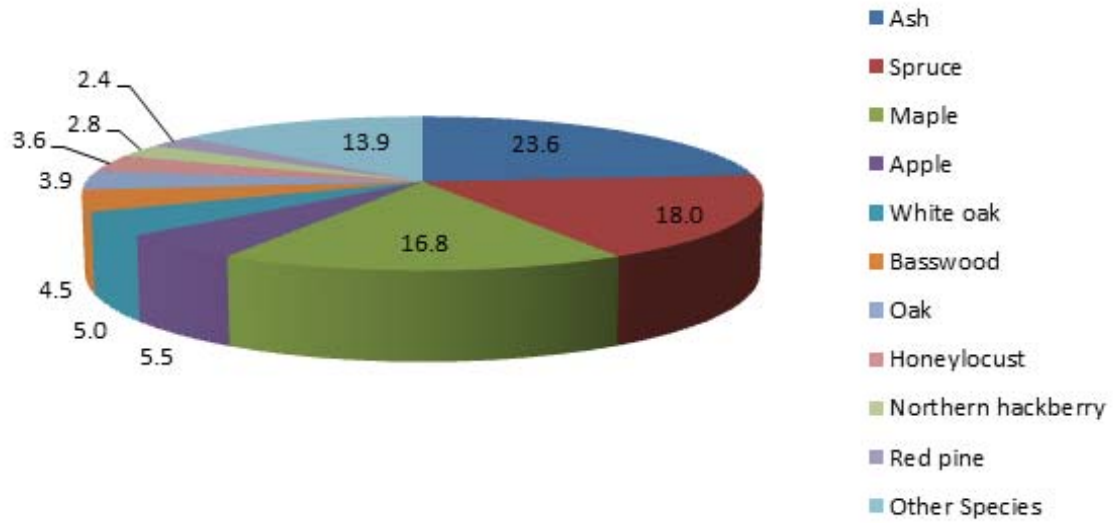
Complete Population of All Trees

9/5/2013

Species	DBH Class (in)									Total Standard Error
	0-3	3-6	6-12	12-18	18-24	24-30	30-36	36-42	> 42	
Juniper	0	0	3	0	5	0	0	0	0	8 (±5)
Total	0	3	50	83	14	7	0	0	0	156 (±29)
Grand Total	60	1,056	3,865	3,804	1,803	995	529	203	165	12,481 (±1,146)

Species Distribution of Public Trees

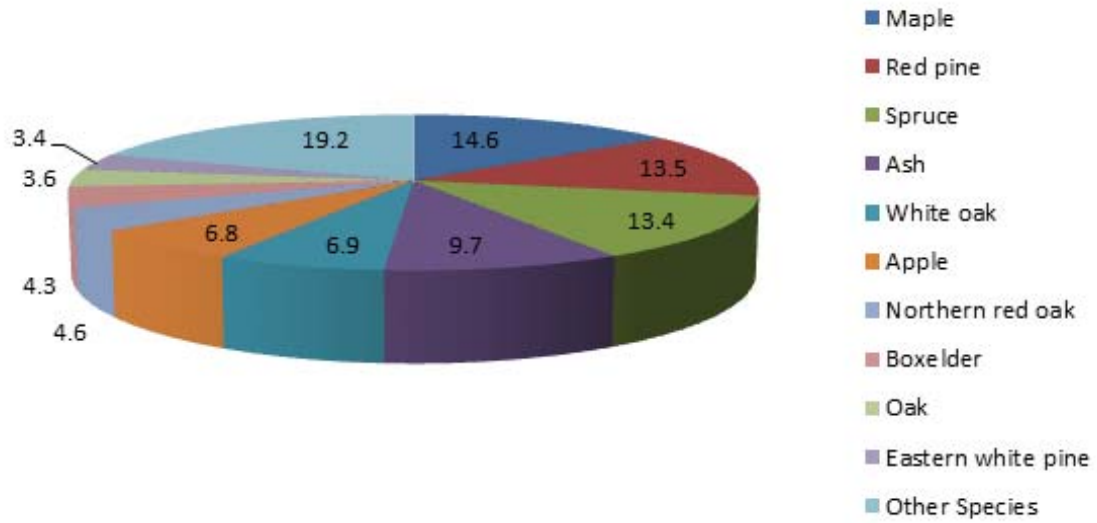
10/18/2013



Species	Percent
Ash	23.6
Spruce	18.0
Maple	16.8
Apple	5.5
White oak	5.0
Basswood	4.5
Oak	3.9
Honeylocust	3.6
Northern hackberry	2.8
Red pine	2.4
Other Species	13.9
Total	100.0

Species Distribution of Private Trees

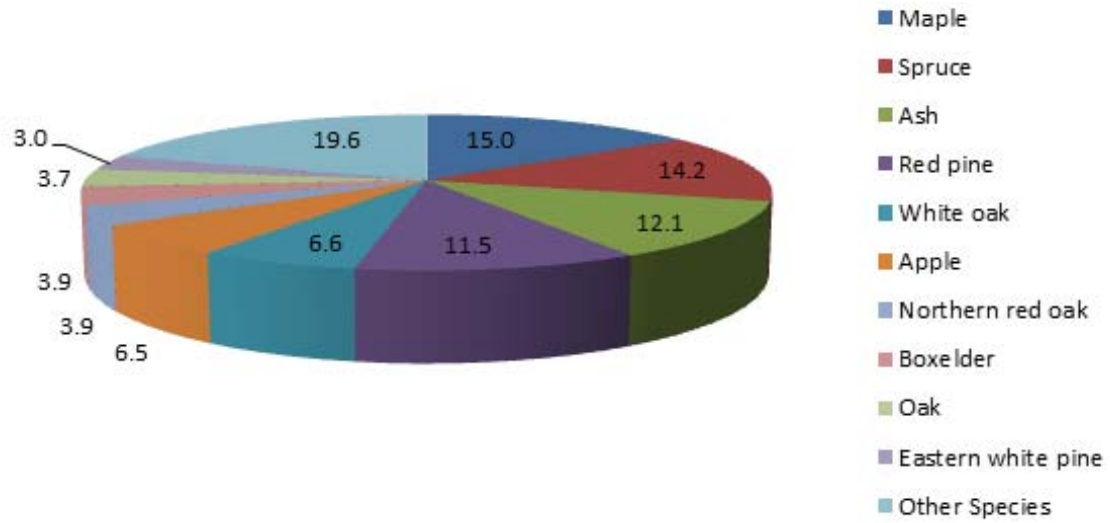
10/18/2013



Species	Percent
Maple	14.6
Red pine	13.5
Spruce	13.4
Ash	9.7
White oak	6.9
Apple	6.8
Northern red oak	4.6
Boxelder	4.3
Oak	3.6
Eastern white pine	3.4
Other Species	19.2
Total	100.0

Species Distribution of All Trees

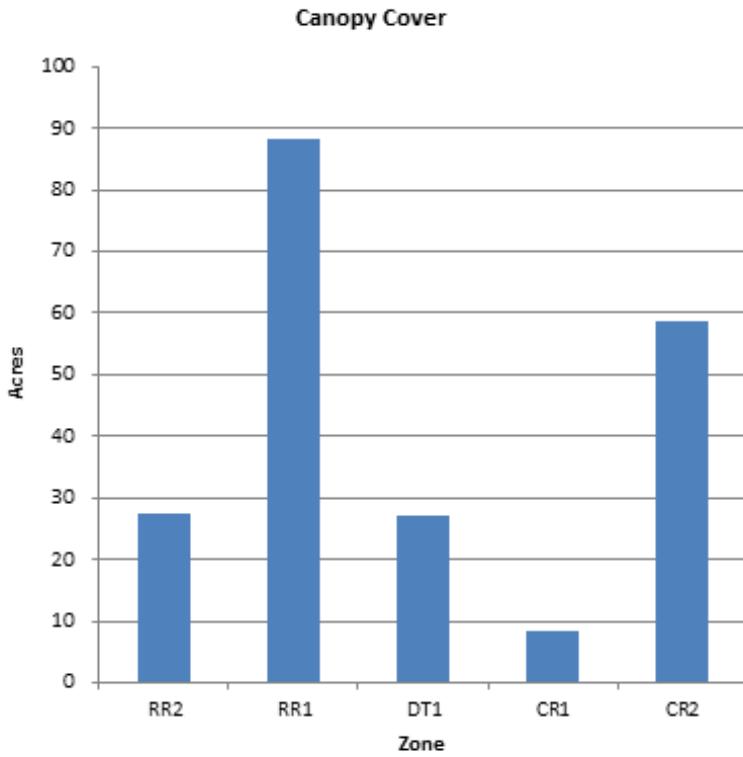
10/18/2013



Species	Percent
Maple	15.0
Spruce	14.2
Ash	12.1
Red pine	11.5
White oak	6.6
Apple	6.5
Northern red oak	3.9
Boxelder	3.9
Oak	3.7
Eastern white pine	3.0
Other Species	19.6
Total	100.0

Canopy Cover of All Trees (Acres)

10/18/2013



Zone	Acres	% of Total Canopy Cover
RR2	27	13.1
RR1	88	42.1
DT1	27	12.9
CR1	8	4.0
CR2	59	27.9
Citywide total	210	100.0

	Total Land Area	Total Street and Sidewalk Area	Total Canopy Cover	Canopy Cover as % of Total Land Area	Canopy Cover as % of Total Streets and Sidewalks
Citywide Total	0	0	210	0.00	0.00

Total Annual Benefits, Net Benefits, and Costs for Public Trees

10/18/2013

Benefits	Total (\$) Standard Error	\$/tree Standard Error	\$/capita Standard Error
Energy	80,005 (±7,004)	36.48 (±3.19)	0.00(±0.00)
CO2	4,656 (±431)	2.12 (±0.20)	0.00(±0.00)
Air Quality	12,853 (±1,147)	5.86 (±0.52)	0.00(±0.00)
Stormwater	94,523 (±8,839)	43.10 (±4.03)	0.00(±0.00)
Aesthetic/Other	77,554 (±7,111)	35.36 (±3.24)	0.00(±0.00)
Total Benefits	269,591 (±23,412)	122.92 (±10.67)	0.00(±0.00)
Costs			
Planting	0	0.00	0.00
Contract Pruning	0	0.00	0.00
Pest Management	0	0.00	0.00
Irrigation	0	0.00	0.00
Removal	0	0.00	0.00
Administration	0	0.00	0.00
Inspection/Service	0	0.00	0.00
Infrastructure Repairs	0	0.00	0.00
Litter Clean-up	0	0.00	0.00
Liability/Claims	0	0.00	0.00
Other Costs	0	0.00	0.00
Total Costs	0	0.00	0.00
Net Benefits	269,591 (±23,412)	122.92 (±10.67)	0.00(±0.00)
Benefit-cost ratio	0.00 (±0.00)		

Condition Rating for Public Trees by Species

9/17/2013

Species	Condition Rating	Tree Count	Standard Error	% of Species	% of Public Trees
American sycamore	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	1	(±3)	31.25	0.01
	Total	1	(±3)	31.25	0.01
Apple	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	166	(±151)	23.90	1.61
	Total	166	(±151)	23.90	1.61
Ash	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	257	(±256)	25.82	2.50
	Total	257	(±256)	25.82	2.50
Basswood	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	17	(±22)	25.49	0.17
	Total	17	(±22)	25.49	0.17
Birch	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	39	(±41)	24.05	0.38
	Total	39	(±41)	24.05	0.38
Black cherry	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	12	(±22)	23.04	0.12
	Total	12	(±22)	23.04	0.12
Black locust	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	1	(±5)	0.91	0.01
	no obvious defects	24	(±79)	21.92	0.23
	Total	25	(±79)	22.83	0.24
Black walnut	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	6	(±11)	23.08	0.06
	Total	6	(±11)	23.08	0.06
Blue spruce	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	55	(±89)	27.98	0.53
	Total	55	(±89)	27.98	0.53
Boxelder	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	104	(±180)	23.81	1.01
	Total	104	(±180)	23.81	1.01
Broadleaf Deciduous Large	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	2	(±5)	26.72	0.02
	Total	2	(±5)	26.72	0.02

Condition Rating for Public Trees by Species

9/17/2013

Species	Condition Rating	Tree Count	Standard Error	% of Species	% of Public Trees
Broadleaf Deciduous Medium	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	15	(±23)	23.08	0.15
	Total	15	(±23)	23.08	0.15
Broadleaf Deciduous Small	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	8	(±12)	27.11	0.08
	Total	8	(±12)	27.11	0.08
Broadleaf Evergreen Large	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	1	(±3)	30.00	0.01
	Total	1	(±3)	30.00	0.01
Broadleaf Evergreen Medium	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	4	(±8)	25.35	0.04
	Total	4	(±8)	25.35	0.04
Broadleaf Evergreen Small	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	6	(±15)	30.00	0.06
	Total	6	(±15)	30.00	0.06
Cottonwood	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	39	(±64)	25.97	0.38
	Total	39	(±64)	25.97	0.38
Eastern cottonwood	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	16	(±45)	31.25	0.16
	Total	16	(±45)	31.25	0.16
Eastern red cedar	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	27	(±37)	22.01	0.26
	Total	27	(±37)	22.01	0.26
Eastern white pine	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	90	(±166)	25.56	0.88
	Total	90	(±166)	25.56	0.88
Elm	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	64	(±68)	23.54	0.62
	Total	64	(±68)	23.54	0.62
Hickory	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	1	(±3)	30.00	0.01
	Total	1	(±3)	30.00	0.01

Condition Rating for Public Trees by Species

9/17/2013

Species	Condition Rating	Tree Count	Standard Error	% of Species	% of Public Trees
Honeylocust	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	16	(±26)	24.35	0.16
	Total	16	(±26)	24.35	0.16
Japanese tree lilac	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	1	(±3)	31.25	0.01
	Total	1	(±3)	31.25	0.01
Juniper	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	2	(±6)	24.06	0.02
	Total	2	(±6)	24.06	0.02
Maple	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	357	(±315)	23.71	3.47
	Total	357	(±315)	23.71	3.47
Mountain ash	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	10	(±13)	25.06	0.10
	Total	10	(±13)	25.06	0.10
Northern catalpa	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	6	(±14)	25.19	0.06
	Total	6	(±14)	25.19	0.06
Northern hackberry	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	29	(±49)	24.84	0.28
	Total	29	(±49)	24.84	0.28
Northern red oak	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	120	(±345)	25.20	1.17
	Total	120	(±345)	25.20	1.17
Northern white cedar	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	27	(±117)	19.68	0.26
	Total	27	(±117)	19.68	0.26
Oak	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	74	(±168)	19.82	0.72
	Total	74	(±168)	19.82	0.72
Ohio buckeye	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	1	(±4)	25.00	0.01
	Total	1	(±4)	25.00	0.01

Condition Rating for Public Trees by Species

9/17/2013

Species	Condition Rating	Tree Count	Standard Error	% of Species	% of Public Trees
Quaking aspen	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	28	(±49)	29.53	0.27
	Total	28	(±49)	29.53	0.27
Red pine	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	348	(±565)	25.08	3.38
	Total	348	(±565)	25.08	3.38
River birch	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	15	(±34)	29.89	0.15
	Total	15	(±34)	29.89	0.15
Scotch pine	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	2	(±8)	23.33	0.02
	Total	2	(±8)	23.33	0.02
spruce	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	1	(±5)	19.57	0.01
	non recoverable	0	(±0)	0.00	0.00
	significant defects	1	(±4)	0.07	0.01
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	322	(±329)	23.41	3.13
Total	323	(±330)	23.48	3.14	
White oak	non recoverable	0	(±0)	0.00	0.00
	significant defects	1	(±4)	0.14	0.01
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	168	(±279)	23.70	1.63
	Total	169	(±280)	23.84	1.64
Willow	non recoverable	0	(±0)	0.00	0.00
	significant defects	0	(±0)	0.00	0.00
	minor defects	0	(±0)	0.00	0.00
	no obvious defects	15	(±24)	23.93	0.15
	Total	15	(±24)	23.93	0.15