

TABLE OF CONTENTS

Mission	3
Units, Terms & Ratios	4
Methods	5
Results	14
Annual Sequestration Estimates	19
Carbon Accounting for Forest Products	21
Attached Files	24
Literature Cited	25
Appendix A: Parcel and Management Unit Maps	26
Appendix B: Sample Plot Data Sheets	36
Acknowledgements	62



“In January of 2009, Colgate became a signatory of the American College and University Presidents’ Climate Commitment (ACUPCC), challenging Colgate to develop and implement actions to achieve climate neutrality by eliminating or offsetting 100 percent of the university’s greenhouse gas emissions.”

—Colgate University’s *Sustainability and Climate Action Plan*

MISSION

Colgate University is working toward the reduction and offsetting of its greenhouse gas emissions. The university’s forest plays a significant role in this effort as a significant carbon sink. Colgate’s *Sustainability and Climate Action Plan* calls for “the establishment of a baseline for forest carbon accounting” along with projections of “annual rates of forest carbon sequestration.” This baseline was established in 2013. This report marks the first periodic re-measurement of forest carbon sequestration.

The establishment of a baseline for forest carbon accounting allows determination of the actual rates of forest carbon sequestration through the re-measurement of forest carbon in future years. Projections of annual rates of forest carbon sequestration allow interim assumptions about the contribution Colgate’s forest makes toward climate neutrality efforts. The rates of sequestration determined in future re-measurements quantify the actual role the forest plays in the university’s carbon budget at 5-year intervals.

This report details the procedures, results and projections from the baseline measurements of Colgate’s forest carbon and 2018 re-measurements and revisions. The methods, data, calculations and technical publications included within this report are intended to allow the reader to duplicate the results. These contents also serve as a guide for the re-measurement of Colgate’s forest carbon at five year intervals.

This mission statement is followed by sections on *units* and *ratios*, a detailed explanation of the *methods* used, a presentation of the *results*, estimates of *annual forest tree carbon sequestration* and a accounting for carbon sequestration in *harvested wood products*.

UNITS, TERMS & RATIOS

Readers may find the following definitions of units, terms and ratios helpful in reading and understanding this report.

- **DBH** = diameter at breast height; breast height is defined as 4.5' above the ground
- **Ton** = short ton = 2,000 lbs = 907.185 kilograms
- **Tonne** = metric ton = 1,000 kilograms = 2,240 lbs.
- **1 ton** = 0.907185 tonnes
- **1 tonne** = 1.1023 tons

The dry weight of wood is its biomass weight; ½ of the weight of biomass is carbon

- **Atomic weight of carbon** = 12 atomic mass units
- **Atomic weight of carbon dioxide** = 44 atomic mass units
- **1 tonne of carbon** = 44 atomic mass units/12 atomic mass units = 3.67 tonnes of carbon dioxide
- **1 tonne of tree carbon** = 3.67 CO₂ equivalent tonnes
- **1 acre** = 0.404686 hectares
- **1 hectare** = 2.47105 acres



METHODS

The procedures outlined in USFS GTR NRS-18 *Measurement Guidelines for the Sequestration of Forest Carbon* served as a general guide for the baselines measurements of the tree carbon in Colgate’s forests. A copy of this document is attached to the electronic version of this report.

Colgate University’s 2013 Tree Farm Stewardship Plan was used in compiling a list of properties and areas to include in the original baseline measurements. All of the properties are in Madison County and within a 7-mile radius of the campus, with the exception of the more distant Upper Saranac parcel (Franklin County). A location map of the forest parcels is shown in Figure 1 on page 6.

The maps, management unit delineations and acreages in the initial plan were sufficient for planning purposes. Subsequent field work resulted in more accurate mapping and updated management unit designations. The forested acreage of each Colgate parcel is as follows:

<u>PARCEL</u>	<u>FOREST ACREAGE</u>
Campus	336.5
Hamilton Street (north & south)	199.8
Beattie Reserve	130.8
Bonney Hill	61.3
Parker Farm	73.1
Bewkes Center	116.2
Johnnycake Hill	12.0
Turkey Hill	116.4
Upper Saranac	11.4
Total Forest Acreage	1,057.5

FIGURE 1. COLGATE UNIVERSITY FOREST LOCATION MAP





Sixty management units spread across nine separate parcels are included in the baseline measurements. The total acreage encompassed by the 2013 baseline measurements was 1,058.7. Development on campus caused the loss of 1.2 acres of forest. The total acreage encompassed by the updated 2018 baseline measurements is 1,057.5. Maps of each of these properties are included in Appendix A. These management units include naturally occurring hardwood forest types in all three successional stages, along with softwood plantations and two recent hardwood plantations.

The first step in establishing baseline measurements was to estimate the number of sample plots necessary for a reliable estimate. GTR-NRS 18 suggests targeting a result that is within 10% of the true mean at the 95-percent confidence level. The Winrock Sampling Calculator spreadsheet (a copy is attached to the electronic version of this report) was used in making this preliminary calculation of the number of sample points.

Mean and standard deviations of tree carbon stocking for comparable forest land were obtained from USFS FIA data and other sources as a proxy for existing stocking levels in making these calculations. Initial calculations called for 47 1/10-acre sample plots. Sensitivity analysis to both the standard deviation and the acceptable level of error, along with the desire to make sure all of the 60 management units on the 9 parcels were sampled, resulted in targeting 147 sample plots. Field inspections, the addition of more acreage and updated mapping increased the final number of sample plots to 174. One of the original sample plots from 2013 was lost to development, bringing the total used in 2018 down to 173. A breakdown of the number of sample plots by parcel and management unit is shown in Table 1 on page 9.

Plot locations were established using systematic spacing within individual management units. Preliminary plot location coordinates were entered in a hand-held GPS unit. Actual locations of the ground varied with site conditions and mapping updates (e.g. a planned plot center did not fall within the target stand, based on the original mapping). When a plot center location was located, a blue plastic stake was placed in the ground as a permanent marker and the plot center coordinates were recorded with a GPS unit. The waypoint number (corresponding to the coordinates) for each plot was recorded on the data sheet for that plot. A KML file showing the location of all 173 plots is included as attachment to the electronic version of this report and can be opened using Google Earth software. A SHP file of plot locations is included as well.



Sample plots are 1/10 acre in size. Circular plots with a radius of 37.2 feet are used. All live trees and shrubs 3.0 inches in diameter at breast height (DBH) and larger were measured. In each case, the DBH (to 1/10 of an inch) and species of the tree or shrub was recorded. A diagram of 1/10 acre sample plot is shown in Figure 2 on page 10.

In making the 2018 re-measurements of sample plots, only 111 of the original 174 plots could be located. Plot center stakes had been removed from 62 plots and one other was lost to development (as noted earlier). GPS coordinate data was sufficient to re-establish sample plots in locations close to the original, but not closely enough to be in the exact locations. As a result, re-measurement data from 111 sample plots are available for use in estimating the amount of carbon sequestered in trees over the past five years.

The 173 sample plots measured in 2018 are used in calculating a new baseline that will be used for making future estimates at five-year intervals. In addition to blue plot center stakes, three witness trees were painted at each plot. These trees have painted circles facing the plot center. If any plot center marker stakes are removed in the future, they can be accurately replaced using the witness trees as a reference. Paint on these witness trees will be refreshed each time a new set of measurement is made.

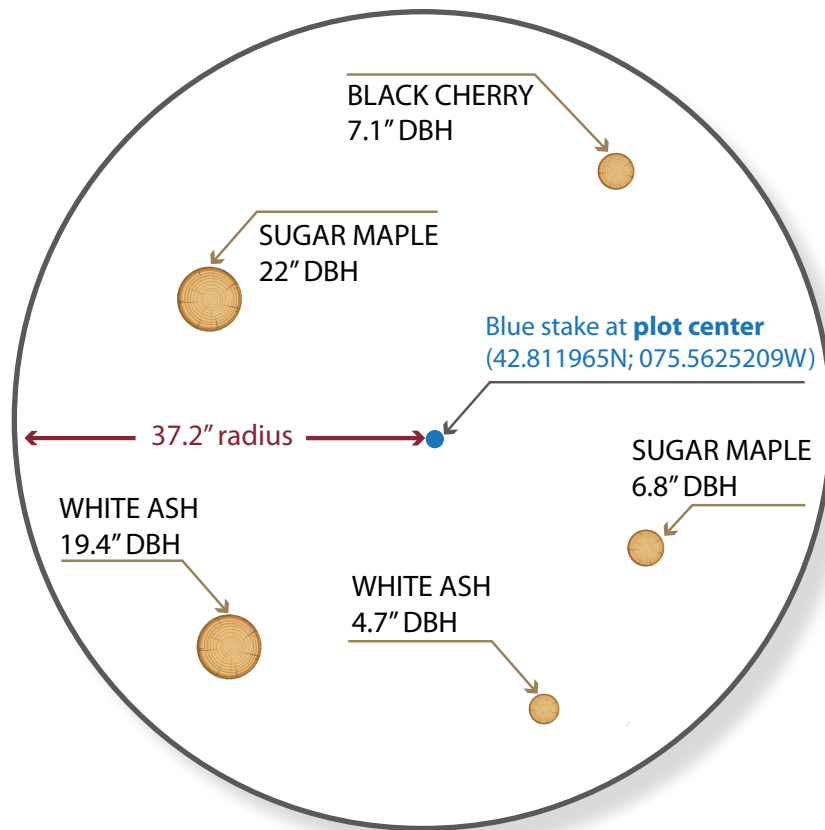


TABLE 1. DISTRIBUTION OF FOREST CARBON RE-MEASUREMENT PLOTS BY PARCEL AND MANAGEMENT UNIT FOR THE COLGATE UNIVERSITY FOREST

PARCEL	MGT UNIT	ACRES	# OF PLOTS	PARCEL	MGT UNIT	ACRES	# OF PLOTS
Campus	1	11.6	3	Beattie	22	14.4	3
Campus	2	13.5	3	Beattie	24	63.9	11
Campus	3	.		Beattie	25	20.6	2
Campus	4	10.7	1	Beattie	26	11.3	2
Campus	5	25.5	4	Beattie	27	14.3	3
Campus	5a	12.6	2	Beattie	28	6.3	1
Campus	6	34.0	5	Bonney Hill	BH1	41.3	6
Campus	7	6.9	2	Bonney Hil	BH2	9.0	2
Campus	8	4.0	1	Bonney Hil	BH3	6.0	1
Campus	9	14.7	2	Bonney Hill	BH4	5.0	1
Campus	10	42.0	4	Parker Farm	PF1	5.0	1
Campus	11	9.3	2	Parker Farm	PF2	39.8	5
Campus	13	112.3	11	Parker Farm	PF3	6.2	2
Campus	D	2.0	1	Parker Farm	PF4	9.3	1
Campus	E	9.5	2	Parker Farm	PF5	12.8	2
Campus	F	20.0	6	Bewkes	BK1	13.4	3
Campus	K	3.9	1	Bewkes	BK3	16.4	2
Hamilton St.	14	4.5	1	Bewkes	BK4	13.5	3
Hamilton St.	15	5.3	1	Bewkes	BK5	23.0	5
Hamilton St.	16	3.2	1	Bewkes	BK6	1.2	1
Hamilton St.	17	6.4	1	Bewkes	BK7	48.7	9
Hamilton St.	18	7.6	1	Johnnycake Hill	JC1	12.0	2
Hamilton St.	19	44.2	5	Turkey Hill	TH1	31.0	4
Hamilton St.	19a	6.0	1	Turkey Hill	TH2	20.0	3
Hamilton St.	20	2.7	1	Turkey Hill	TH3	8.0	1
Hamilton St.	21N	46.5	9	Turkey Hill	TH4	23.4	4
Hamilton St.	P	3.8	1	Turkey Hill	TH5	13.0	2
Hamilton St.	21S	40.0	6	Turkey Hill	TH6	11.0	2
Hamilton St.	23	22.5	4	Turkey Hill	TH7	10.0	2
Hamilton St.	N	7.1	2	Upper Saranac	US1	11.4	2
TOTAL						1057.5	173



FIGURE 2. DIAGRAM OF A 1/10 ACRE FOREST TREE CARBON SAMPLING PLOT



A Ny-Rod type pole was used as an aid in measuring the plot radius. This pole has a brightly colored marking 13.5" wide at breast height. A diameter 13.5" has a limiting distance of 37.2' for a basal area factor (BAF) of 10 (meaning each tree in the sample represents 10 square feet of basal area). This allows a person measuring trees to determine whether a tree is within the radius of the plot by looking back at the colored marking on the pole with a BAF 10 angle gauge. The distance of borderline trees from the plot center was measured to determine if they fell within the plot radius.

A separate tally sheet was created for each sample plot. Each tally sheet contains the parcel name, date and waypoint number. Individual measurements of each stem were recorded (DBH, species). A list of species codes and all 173 tally sheets are included in Appendix B to this report.

The permanent markers, witness tree markings and GPS coordinates of these sample points will allow re-measurement at the same locations every five years, as recommended in GTR-NRS 18. Re-measurement allows calculation of the amount of carbon sequestered in trees, as the difference between the re-measurement totals and the baseline measurements.

Calculation of the total tree carbon (TTC) represented by the sample took several steps. Plot data was grouped by management unit. This allowed calculation of the amount of tree carbon in the sample for each unit, followed by an estimate of tree carbon for the total unit.

Calculations are based on the commonly accepted biomass equation and parameters for total above ground biomass established by Jenkins, et al (2003), excerpted below:

Table 4. Parameters and equations* for estimating total aboveground biomass for all hardwood and softwood species in the United States.

	Species group	Parameters		Data points [†]	Max ^{††} dbh cm	RMSE [‡] log units	R ²
		β_0	β_1				
Hardwood	Aspen/alder/cottonwood/willow	-2.2094	2.3867	230	70	0.507441	0.953
	Soft maple/birch	-1.9123	2.3651	316	66	0.491685	0.958
	Mixed hardwood	-2.4800	2.4835	289	56	0.360458	0.980
	Hard maple/oak/hickory/beech	-2.0127	2.4342	485	73	0.236483	0.988
Softwood	Cedar/larch	-2.0336	2.2592	196	250	0.294574	0.981
	Douglas-fir	-2.2304	2.4435	165	210	0.218712	0.992
	True fir/hemlock	-2.5384	2.4814	395	230	0.182329	0.992
	Pine	-2.5356	2.4349	331	180	0.253781	0.987
	Spruce	-2.0773	2.3323	212	250	0.250424	0.988
Woodland ^{‡‡}	Juniper/oak/mesquite	-0.7152	1.7029	61	78	0.384331	0.938

* Biomass equation:

$$bm = \text{Exp}(\beta_0 + \beta_1 \ln dbh)$$

where

bm = total aboveground biomass (kg) for trees 2.5cm dbh and larger

dbh = diameter at breast height (cm)

Exp = exponential function

ln = natural log base "e" (2.718282)

[†] Number of data points generated from published equations (generally at 5 cm dbh intervals) for parameter estimation.

^{††} Maximum dbh of trees measured in published equations.

[‡] Root mean squared error or estimate of the standard deviation of the regression error term in natural log units.

^{‡‡} Woodland group includes both hardwood and softwood species from dryland forests.

FIGURE 3. SCREENSHOT OF THE FOREST AND TREE CARBON EXCEL SPREADSHEET

	A	B	C	D	E	F	G	H	I	J	K	L
1	Forest and Tree Carbon Spreadsheet											
2												
3		Stand ID:	BH1			AGB		BGB	AGC	TTC	AGC	TTC
4			43.5 acres			(kg)		(kg)	(mt)	(mt)	(tons)	(tons)
5		Inverse of Sampling Intensity:	68.8		sample totals	51,585.60		9,781.60	25.79	30.66	28.43	33.82
6					stand total	3,549,089.3		672,973.9	1,774.5	2,111.0	1,956.1	2,327.0
7												
8		there are separate entry sections for each plot, each entry sheet holds up to 100 trees; there are 100 entry sheets in all, scroll down for more										
9		enter species, DBH (in) and Species Group Code for each tree										
10												
11		Plot ID	BH5		Waypoint ID	870						
12												
13	1	Species	DBH (in)	Group Code	DBH (cm)	AGB	AGB/TB	BGB	AGC	TTC	AGC	TTC
14		Species	DBH (in)	Group Code	DBH (cm)	(kg)		(kg)	(mt)	(mt)	(tons)	(tons)
15	1	SM	8.7	4	22.1	250.2	0.191	47.85	0.125	0.149	0.138	0.164
16	2	SM	10.4	4	26.4	386.4	0.190	73.45	0.193	0.23	0.213	0.253
17	3	SM	11.3	4	28.7	472.9	0.190	89.67	0.236	0.28	0.261	0.310
18	4	SM	10.2	4	25.9	368.5	0.190	70.10	0.184	0.22	0.203	0.242
19	5	SM	14	4	35.6	796.6	0.189	150.24	0.398	0.47	0.439	0.522
20	6	SM	15.1	4	38.4	957.7	0.188	180.31	0.479	0.57	0.528	0.627
21	7	SM	7.9	4	20.1	197.9	0.192	37.98	0.099	0.12	0.109	0.130
22	8	SM	11	4	27.9	442.9	0.190	84.05	0.221	0.26	0.244	0.290
23	9	SM	9.3	4	23.6	294.3	0.191	56.16	0.147	0.18	0.162	0.193
24	10	SM	8	4	20.3	204.0	0.192	39.14	0.102	0.12	0.112	0.134
25	11	SM	13.2	4	33.5	690.3	0.189	130.37	0.345	0.41	0.380	0.452
26	12	SM	11	4	27.9	442.9	0.190	84.05	0.221	0.26	0.244	0.290
27	13	SM	8.1	4	20.6	210.3	0.192	40.32	0.105	0.13	0.116	0.138
28	14	SM	7.5	4	19.1	174.3	0.192	33.54	0.087	0.10	0.096	0.115
29	15	SM	11.9	4	30.2	536.3	0.189	101.56	0.268	0.32	0.296	0.352
30	16	SM	13.5	4	34.3	729.1	0.189	137.63	0.365	0.43	0.402	0.478
31	17	SM	10.4	4	26.4	386.4	0.190	73.45	0.193	0.23	0.213	0.253
32	18	SM	13	4	33.0	665.1	0.189	125.66	0.333	0.40	0.367	0.436
33	19	SM	10.7	4	27.2	414.1	0.190	78.65	0.207	0.25	0.228	0.272
34	20	SM	12.8	4	32.5	640.5	0.189	121.05	0.320	0.38	0.353	0.420
35	21	SM	13.9	4	35.3	782.8	0.189	147.66	0.391	0.47	0.431	0.513
36	22	SM	10.7	4	27.2	414.1	0.190	78.65	0.207	0.25	0.228	0.272
37	23	SM	10.6	4	26.9	404.7	0.190	76.89	0.202	0.24	0.223	0.265
38	24				0.0	0.0	FALSE	FALSE	FALSE	FALSE	0.000	0.000

This formula and parameters were used in creating a *Forest and Tree Carbon Spreadsheet*. An individual worksheet was created for each management unit, with a file provided for each of the nine distinct parcels involved (individual spreadsheets for each parcel are attached in the electronic version of this report). Each worksheet allows individual plot data (species & DBH for each stem) to be entered for each management unit. A screen shot of this spreadsheet is shown in Figure 3 above.


In addition to species and DBH, the user must provide the number of the species group appropriate for each entry. Species groups were referenced from Jenkins, et al (2003).

The spreadsheet converts DBH from inches to centimeters for use in the formula. The species group entry determines which set of parameters is applied. Above ground biomass is calculated in kilograms. Below ground biomass is estimated and then added to above ground biomass. Total tree biomass is converted to carbon (using a factor of 0.5) and expressed in both metric and short tons.


Carbon from all of the trees in the individual management unit's sample are summed. These totals are then multiplied by the inverse of sampling intensity ($1 \div [\# \text{ of plots} \times 0.1 \text{ acres} \div \text{management unit size in acre}]$) to arrive at an estimate of total tree carbon in the management unit. Individual management unit totals are summed to arrive at the total estimate of tree carbon in university's forests.




RESULTS




The 2018 baseline estimate of total tree carbon in the Colgate University Forest is 52,794 tonnes. Average stocking is 49.9 tonnes/acre (123.3 tonnes/hectare). While some recently established hardwood plantations have no measurable amount of tree carbon, two small management units with mature forest communities had 123 to 196 tonnes/acre. Disregarding these outliers results in a negligible change to the average stocking (50.1 tonnes/acre). A summary of the total tree carbon for individual management units is shown in Table 2 on page 15. Tree carbon stocking levels (tonnes/acre) are shown in Table 3 on page 16.



Each tonne of tree carbon is the equivalent of 3.67 tonnes of carbon dioxide. Applying this conversion factor, the 2018 baseline estimate of carbon dioxide sequestered in the Colgate University Forest is 193,755 tonnes. A summary of the carbon dioxide equivalents sequestered in each management units is shown in Table 4 on page 17. Stocking levels (tonnes/acre) of carbon dioxide equivalents for each of the management units are shown in Table 5 on page 18.



These 2018 baselines estimate of tree carbon and carbon dioxide equivalents establish the new basis for carbon accounting on the university's forest. Re-measurement in five years will provide new totals. The difference between the new totals and the baseline measurements is the amount of carbon sequestered over that period. This sequestered carbon (and carbon dioxide equivalents) can be annualized (by dividing by five) and used in Colgate's overall carbon accounting.



The conditions observed during the baseline inventory of Colgate's forest provide the basis for projections about the amount of carbon likely to be sequestered in trees over the next five years. These projections may be used as a proxy for the forest's contribution to Colgate's carbon budget until the re-measurement allows actual calculations. The carbon budget can then be reconciled to account for any difference between the projections and actual sequestration. The following section details the process for projecting annual sequestration.



TABLE 2. SUMMARY OF TOTAL TREE CARBON ESTIMATES BY MANAGEMENT UNIT FOR THE COLGATE UNIVERSITY FOREST

PARCEL	MGT UNIT	TOTAL TREE CARBON (TONNES)	PARCEL	MGT UNIT	TOTAL TREE CARBON (TONNES)
Campus	1	400.6	Beattie	22	1,071.5
Campus	2	748.9	Beattie	24	1,759.5
Campus	3	242.1	Beattie	25	391.0
Campus	4	674.6	Beattie	26	375.5
Campus	5	1,343.0	Beattie	27	1,002.1
Campus	5a	546.2	Beattie	28	148.0
Campus	6	1,936.7	Bonney Hill	BH1	2,678.5
Campus	7	611.9	Bonney Hill	BH2	376.8
Campus	8	206.8	Bonney Hill	BH3	372.9
Campus	9	853.9	Bonney Hill	BH4	137.3
Campus	10	2,212.5	Parker Farm	PF1	540.6
Campus	11	684.2	Parker Farm	PF2	2,126.8
Campus	13	4,319.5	Parker Farm	PF3	265.9
Campus	D	164.6	Parker Farm	PF4	257.2
Campus	E	649.2	Parker Farm	PF5	42.5
Campus	F	461.1	Bewkes	BK1	818.8
Campus	K	-	Bewkes	BK3	1,263.8
Hamilton St.	14	230.1	Bewkes	BK4	449.6
Hamilton St.	15	125.4	Bewkes	BK5	1,973.7
Hamilton St.	16	168.0	Bewkes	BK6	235.3
Hamilton St.	17	517.0	Bewkes	BK7	1,176.4
Hamilton St.	18	461.9	Johnnycake Hill	JC1	428.8
Hamilton St.	19	1,333.3	Turkey Hill	TH1	2,047.3
Hamilton St.	19a	236.7	Turkey Hill	TH2	1,515.9
Hamilton St.	20	331.2	Turkey Hill	TH3	181.7
Hamilton St.	21N	3,427.8	Turkey Hill	TH4	797.7
Hamilton St.	P	288.1	Turkey Hill	TH5	1,078.3
Hamilton St.	21S	3,575.2	Turkey Hill	TH6	434.1
Hamilton St.	23	898.7	Turkey Hill	TH7	610.5
Hamilton St.	N	-	Upper Saranac	US1	587.1
				TOTAL	52,794.3



TABLE 3. TOTAL TREE CARBON ESTIMATES PER ACRE AND PER HECTARE FOR INDIVIDUAL MANAGEMENT UNITS IN THE COLGATE UNIVERSITY FOREST

PARCEL	MGT UNIT	CTONNES PER ACRE	CTONNES PER HA	PARCEL	MGT UNIT	CTONNES PER ACRE	CTONNES PER HA
Campus	1	34.5	85.3	Beattie	22	74.4	183.7
Campus	2	55.5	137.0	Beattie	24	27.5	68.0
Campus	3	60.5	149.4	Beattie	25	19.0	46.9
Campus	4	63.0	155.7	Beattie	26	33.2	82.0
Campus	5	52.7	130.0	Beattie	27	70.1	173.0
Campus	5a	43.3	107.0	Beattie	28	23.5	58.0
Campus	6	57.0	140.6	Bonney Hill	BH1	64.9	160.1
Campus	7	88.7	219.0	Bonney Hill	BH2	41.9	103.4
Campus	8	51.7	127.7	Bonney Hill	BH3	62.2	153.5
Campus	9	58.1	143.4	Bonney Hill	BH4	27.5	67.8
Campus	10	52.7	130.1	Parker Farm	PF1	108.1	267.0
Campus	11	73.6	181.7	Parker Farm	PF2	53.4	131.9
Campus	13	38.5	95.0	Parker Farm	PF3	42.9	105.9
Campus	D	82.3	203.2	Parker Farm	PF4	27.7	68.3
Campus	E	68.3	168.7	Parker Farm	PF5	3.3	8.2
Campus	F	23.1	56.9	Bewkes	BK1	61.1	150.9
Campus	K	-	-	Bewkes	BK3	77.1	190.3
Hamilton St.	14	51.1	126.3	Bewkes	BK4	33.3	82.2
Hamilton St.	15	23.7	58.4	Bewkes	BK5	85.8	211.9
Hamilton St.	16	52.5	129.6	Bewkes	BK6	196.1	484.2
Hamilton St.	17	80.8	199.5	Bewkes	BK7	24.2	59.6
Hamilton St.	18	60.8	150.1	Johnnycake Hill	JC1	35.7	88.2
Hamilton St.	19	30.2	74.5	Turkey Hill	TH1	66.0	163.1
Hamilton St.	19a	39.5	97.4	Turkey Hill	TH2	75.8	187.1
Hamilton St.	20	122.7	302.9	Turkey Hill	TH3	22.7	56.1
Hamilton St.	21N	73.7	182.0	Turkey Hill	TH4	34.1	84.2
Hamilton St.	P	75.8	187.2	Turkey Hill	TH5	82.9	204.8
Hamilton St.	21S	89.4	220.7	Turkey Hill	TH6	39.5	97.4
Hamilton St.	23	39.9	98.6	Turkey Hill	TH7	61.1	150.7
Hamilton St.	N	-	-	Upper Saranac	US1	51.5	127.2



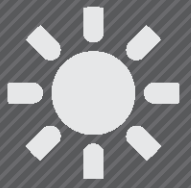
TABLE 4. SUMMARY OF CARBON DIOXIDE EQUIVALENTS ESTIMATES BY MANAGEMENT UNIT FOR THE COLGATE UNIVERSITY FOREST

PARCEL	MGT UNIT	CO2 TONNES	PARCEL	MGT UNIT	CO2 TONNES
Campus	1	1,470.2	Beattie	22	3,932.4
Campus	2	2,748.5	Beattie	24	6,457.4
Campus	3	888.5	Beattie	25	1,435.0
Campus	4	2,475.8	Beattie	26	1,378.1
Campus	5	4,928.8	Beattie	27	3,677.7
Campus	5a	2,004.6	Beattie	28	543.2
Campus	6	7,107.7	Bonney Hill	BH1	9,830.1
Campus	7	2,245.7	Bonney Hill	BH2	1,382.9
Campus	8	759.0	Bonney Hill	BH3	1,368.5
Campus	9	3,133.8	Bonney Hill	BH4	503.9
Campus	10	8,119.9	Parker Farm	PF1	1,984.0
Campus	11	2,511.0	Parker Farm	PF2	7,805.4
Campus	13	15,852.6	Parker Farm	PF3	975.9
Campus	D	604.1	Parker Farm	PF4	943.9
Campus	E	2,382.6	Parker Farm	PF5	156.0
Campus	F	1,692.2	Bewkes	BK1	3,005.0
Campus	K	-	Bewkes	BK3	4,638.1
Hamilton St.	14	844.5	Bewkes	BK4	1,650.0
Hamilton St.	15	460.2	Bewkes	BK5	7,243.5
Hamilton St.	16	616.6	Bewkes	BK6	863.6
Hamilton St.	17	1,897.4	Bewkes	BK7	4,317.4
Hamilton St.	18	1,695.2	Johnnycake Hill	JC1	1,573.7
Hamilton St.	19	4,893.2	Turkey Hill	TH1	7,513.6
Hamilton St.	19a	868.7	Turkey Hill	TH2	5,563.4
Hamilton St.	20	1,215.5	Turkey Hill	TH3	666.8
Hamilton St.	21N	12,580.0	Turkey Hill	TH4	2,927.6
Hamilton St.	P	1,057.3	Turkey Hill	TH5	3,957.4
Hamilton St.	21S	13,121.0	Turkey Hill	TH6	1,593.1
Hamilton St.	23	3,298.2	Turkey Hill	TH7	2,240.5
Hamilton St.	N	-	Upper Saranac	US1	2,154.7
				TOTAL	193,755.1



TABLE 5. TOTAL TREE CARBON DIOXIDE ESTIMATES PER ACRE AND PER HECTARE FOR INDIVIDUAL MANAGEMENT UNITS IN THE COLGATE UNIVERSITY FOREST

PARCEL	MGT UNIT	CO2 TONNES		PARCEL	MGT UNIT	CO2 TONNES	
		PER ACRE	PER HA			PER ACRE	PER HA
Campus	1	126.7	312.9	Beattie	22	273.1	674.3
Campus	2	203.6	502.7	Beattie	24	101.1	249.5
Campus	3	222.1	548.5	Beattie	25	69.7	172.0
Campus	4	231.4	571.3	Beattie	26	122.0	301.1
Campus	5	193.3	477.3	Beattie	27	257.2	635.0
Campus	5a	159.1	392.8	Beattie	28	86.2	212.9
Campus	6	209.0	516.2	Bonney Hill	BH1	238.0	587.7
Campus	7	325.5	803.6	Bonney Hill	BH2	153.7	379.4
Campus	8	189.7	468.5	Bonney Hill	BH3	228.1	563.2
Campus	9	213.2	526.4	Bonney Hill	BH4	100.8	248.8
Campus	10	193.3	477.4	Parker Farm	PF1	396.8	979.8
Campus	11	270.0	666.7	Parker Farm	PF2	196.1	484.2
Campus	13	141.2	348.5	Parker Farm	PF3	157.4	388.6
Campus	D	302.0	745.8	Parker Farm	PF4	101.5	250.6
Campus	E	250.8	619.2	Parker Farm	PF5	12.2	30.1
Campus	F	84.6	208.9	Bewkes	BK1	224.3	553.7
Campus	K	-	-	Bewkes	BK3	282.8	698.3
Hamilton St.	14	187.7	463.4	Bewkes	BK4	122.2	301.8
Hamilton St.	15	86.8	214.4	Bewkes	BK5	314.9	777.6
Hamilton St.	16	192.7	475.7	Bewkes	BK6	719.6	1776.9
Hamilton St.	17	296.5	732.0	Bewkes	BK7	88.7	218.9
Hamilton St.	18	223.0	550.7	Johnnycake Hill	JC1	131.1	323.8
Hamilton St.	19	110.7	273.3	Turkey Hill	TH1	242.4	598.5
Hamilton St.	19a	144.8	357.5	Turkey Hill	TH2	278.2	686.8
Hamilton St.	20	450.2	1111.6	Turkey Hill	TH3	83.4	205.8
Hamilton St.	21N	270.5	668.0	Turkey Hill	TH4	125.1	308.9
Hamilton St.	P	278.2	687.0	Turkey Hill	TH5	304.4	751.6
Hamilton St.	21S	328.0	809.9	Turkey Hill	TH6	144.8	357.6
Hamilton St.	23	146.6	361.9	Turkey Hill	TH7	224.1	553.2
Hamilton St.	N	-	-	Upper Saranac	US1	189.0	466.7



ANNUAL SEQUESTRATION ESTIMATES

An estimate of carbon sequestered in trees in Colgate's forest over the past five years can be made from the 111 sample plots from 2013 that were re-measured in 2018. The trees in these sample points had approximately 561.4 tonnes of carbon in 2013 and 615.4 tonnes of carbon in 2018. The differences in these totals (54 tonnes of carbon) is the net growth that occurred over the past five years. Multiplying this sample estimate by the inverse sampling intensity ($1 \div (11.1 \text{ acres} \div 1,057.5 \text{ acres})$) results in a carbon sequestration estimate in trees in the Colgate forest of 5,145 tonnes over the past five years.

Multiplying the tree carbon sequestration (5,145 tonnes) by 3.67 results in a carbon dioxide sequestration estimate of 18,882 tonnes over the past five years. Dividing this total by 5 results in an estimate of annual carbon dioxide sequestration in trees of 3,776.4 tonnes.

A second estimate of carbon sequestration was made from 90 of the re-measured plots, employing a plot selection that is as spatially representative of each of the nine parcels as possible. The original sample measurements in 2013 were stratified to allow individual management unit estimates. Vandalism and removal of 63 plot stakes makes this stratification obsolete and prevents management unit level estimates. The estimate made from re-measurements of 111 plots weights each plot equally. Note that neither of the original plots on the Johnnycake Hill parcel were still intact, so a plot with a similar timber type (larch plantation) was used as a proxy.

The trees in 90 sample plots used in the second estimate had approximately 434.2 tonnes of carbon in 2013 and 478.1 tonnes of carbon in 2018. The differences in these totals (43.9 tonnes of carbon) is the net growth that occurred over the past five years. Multiplying this sample estimate by the inverse sampling intensity ($1 \div (9 \text{ acres} \div 1,057.5 \text{ acres})$) results in a carbon sequestration estimate in trees in the Colgate forest of 5,157 tonnes over the past five years.

Multiplying the tree carbon sequestration in the second estimate (5,157 tonnes) by 3.67 results in a carbon dioxide sequestration estimate of 18,926 tonnes over the past five years. Dividing this total by 5 results in an estimate of annual carbon dioxide sequestration in trees of 3,785.3 tonnes.



The carbon sequestration estimate from the 90-plot sample is just slightly more (0.2%) than the estimate from the 111-plot sample. With virtually no difference between the two, the estimate from the larger sample (3,776.4 tonnes of carbon dioxide equivalents) should be used in Colgate's carbon accounting for the 5-year period between 2013 and 2018. An annual carbon dioxide equivalents sequestration rate of 3,776.4 tonnes should be used for each of the previous five years.



CARBON ACCOUNTING FOR FOREST PRODUCTS

The Colgate University Forest is managed on a sustainable basis, in accordance with a stewardship plan approved by the Open Lands and Forest Stewardship Oversight Committee. The forest is managed for a wide range of benefits, with teaching, research, and outdoor recreation being foremost. Timber production is one of the complimentary uses of the forest and periodic timber harvests take place. When these timber harvests take place, the products that result sequester carbon for varying lengths of time. It is important to accurately account for this as part of the university's carbon budget.

Two timber harvests took place in the five- year interval between the initial forest carbon estimates in 2013 and the re-measurements in 2018. A salvage harvest was on done in Stand 24 on the Beattie parcel to remove dead and slow growing white spruce stems and facilitate regeneration of native hardwood species. A shelterwood harvest was done in Stand JC1 on the Johnnycake Hill parcel to remove mature larch from this plantation and facilitate regeneration of native hardwood species. These harvests took place in Winter and Spring, 2014, respectively.

The following timber volumes were harvested:

<u>unit</u>	<u>date</u>	<u>chips</u> <u>(tons)</u>	<u>softwood</u> <u>logs</u> <u>(MBF)</u>	<u>hardwood</u> <u>logs</u> <u>(MBF)</u>
Beattie 24	Winter 2014	1,955	6.900	
Johnnycake Hill JC1	Spring 2014	824	40.036	0.277

* MBF = thousand board feet



Carbon accounting for these harvest products begins in the year 2014. The combined 2,779 tons of wood chips that were harvested were sold to a wood burning electrical plant (ReEnergy, Lyonsdale, NY). Using wood as a fuel source in this production of energy is an indirect substitute of atmospheric carbon for fuel from fossil-based carbon. In 2018 the US Environmental Protection Agency (EPA) declared that forest biomass used for energy production is carbon neutral, provided that this energy production does not cause conversion of forests to non-forest uses (EPA, 2018). Based on this, it appears that Colgate University does not have to include emissions from the use of these harvested wood chips in its carbon accounting.



The remaining forest products volumes from these two timber harvests include softwood and hardwood logs. The timber harvest volumes shown earlier were entered in the USDA Forest Service's i-Tree Harvest Carbon Calculator to determine a schedule for accounting for carbon emissions. Stand level reports for both timber harvests are included as attachments in the electronic version of this document. The information provided in these reports was used in calculating periodic emissions volumes for use in Colgate's carbon accounting. A combined emissions schedule for both harvests is shown in Table 6.

Notes on Forest Lost to Development

As noted earlier in the report, 1.2 acres of Colgate University's forestland was lost to development in 2017. This occurred in 2017. This activity was a land use change and not part of the management of open space lands. An attempt was made to accurately account for the carbon in the forest products in the trees that were removed, but the project manager was uncooperative.

A complete tally was made of all trees identified for removal in the development project. These trees contained approximately 27.2 tonnes of carbon, equivalent to 99.8 tonnes of carbon dioxide. These trees were accounted for in Colgate University's 2017 carbon budget.



TABLE 6. FOREST CARBON ACCOUNTING CHEDULE FOR 2014 TIMBER HARVESTS ON THE COLGATE UNIVERSITY FOREST

Year	Products (CO ₂) (tonnes)	Landfill (CO ₂) (tonnes)	Stored (CO ₂) (tonnes)	Energy (CO ₂) (tonnes)	Emissions (CO ₂) (tonnes)
0	45.4	0.0	45.4	18.8	14.3
10	29.1	8.8	37.8	22.6	18.2
20	21.5	12.5	34.0	24.4	20.2
30	17.1	14.4	31.5	25.5	21.6
40	14.2	15.5	29.8	26.1	22.7
50	12.1	16.3	28.4	26.6	23.5
60	10.5	16.9	27.4	26.9	24.3
70	9.2	17.4	26.6	27.2	24.9
80	8.2	17.8	25.9	27.2	25.4
90	7.3	18.1	25.5	27.3	25.9
100	6.5	18.4	25.0	27.3	26.3
Average	15.4	14.7	30.2	25.7	22.7



FILE ATTACHMENTS

Several files are attached to the pdf version of this document. These include the Colgate Carbon Calculator MS Excel spreadsheets for each of the parcels, reference publications and KML and SHP files showing the locations of sample plots.

ATTACHMENT LIST

- | | |
|--|--|
| COLE 1605(b) Report for NY (PDF) | Bewkes Forest Carbon Calculations (XLS) |
| Measurement Guidelines for the Sequestration of Forest Carbon (PDF) | Bonney Hill Forest Carbon Calculations (XLS) |
| Methods for Calculating Forest Carbon with Standard Tables (PDF) | Campus Forest Carbon Calculations (XLS) |
| National-Scale Biomass Estimators for United State Tree Species(PDF) | Hamilton Street Forest Carbon Calculations (XLS) |
| Colgate Forest Carbon Measurement Plot Locations (KML) | Johnnycake Hill Forest Carbon Calculations (XLS) |
| Colgate Forest Carbon Measurement Plot Locations (SHP; zipped) | Parker Farm Forest Carbon Calculations (XLS) |
| Winrock Sampling Calculator Spreadsheet (XLS) | Turkey Hill Forest Carbon Calculations (XLS) |
| Colgate Forest and Tree Carbon Spreadsheet – blank template (XLS) | Upper Saranac Forest Carbon Calculations (XLS) |
| Beattie Forest Carbon Calculations (XLS) | |

Clicking on the paperclip button in the upper left hand corner reveals the attached files in the lower section of the window. Files can be opened, viewed, edited and saved in new locations.

Name	Modified	Size	Compressed size
2013 Colgate Forest Carbon Measurement Plot Locations.kml	6/18/2013 9:23:55 AM	122 KB	7 KB
Beattie 24 - i-Tree Harvest Carbon Calculator report.pdf	8/7/2018 2:04:21 PM	123 KB	112 KB
Colgate 2018 re-measurement plot coordinates - shp file.zip	8/14/2018 11:11:34 AM	7 KB	6 KB
Colgate Forest 2018 re-measurement plot coordinates.kml	8/14/2018 11:04:48 AM	117 KB	5 KB
Johnnycake Hill - i-Tree Harvest Carbon Calculator report.pdf	8/7/2018 2:01:42 PM	123 KB	112 KB
Measurement Guidelines for the Sequestration of Forest Carbon.pdf	1/9/2013 3:14:45 PM	618 KB	574 KB
Methods for Calculating Forest Carbon with Standard Tables.pdf	6/15/2013 12:32:46 PM	1,573 KB	1,435 KB
National-Scale Biomass Estimators for United State Tree Species.pdf	4/22/2013 1:32:54 PM	207 KB	182 KB
Rev3-Forest Carbon Inventory Cover-DRAFT.pdf	6/25/2013 3:56:37 PM	168 KB	142 KB
Winrock Sampling Calculator Spreadsheet.xls	6/20/2013 9:00:14 AM	251 KB	121 KB

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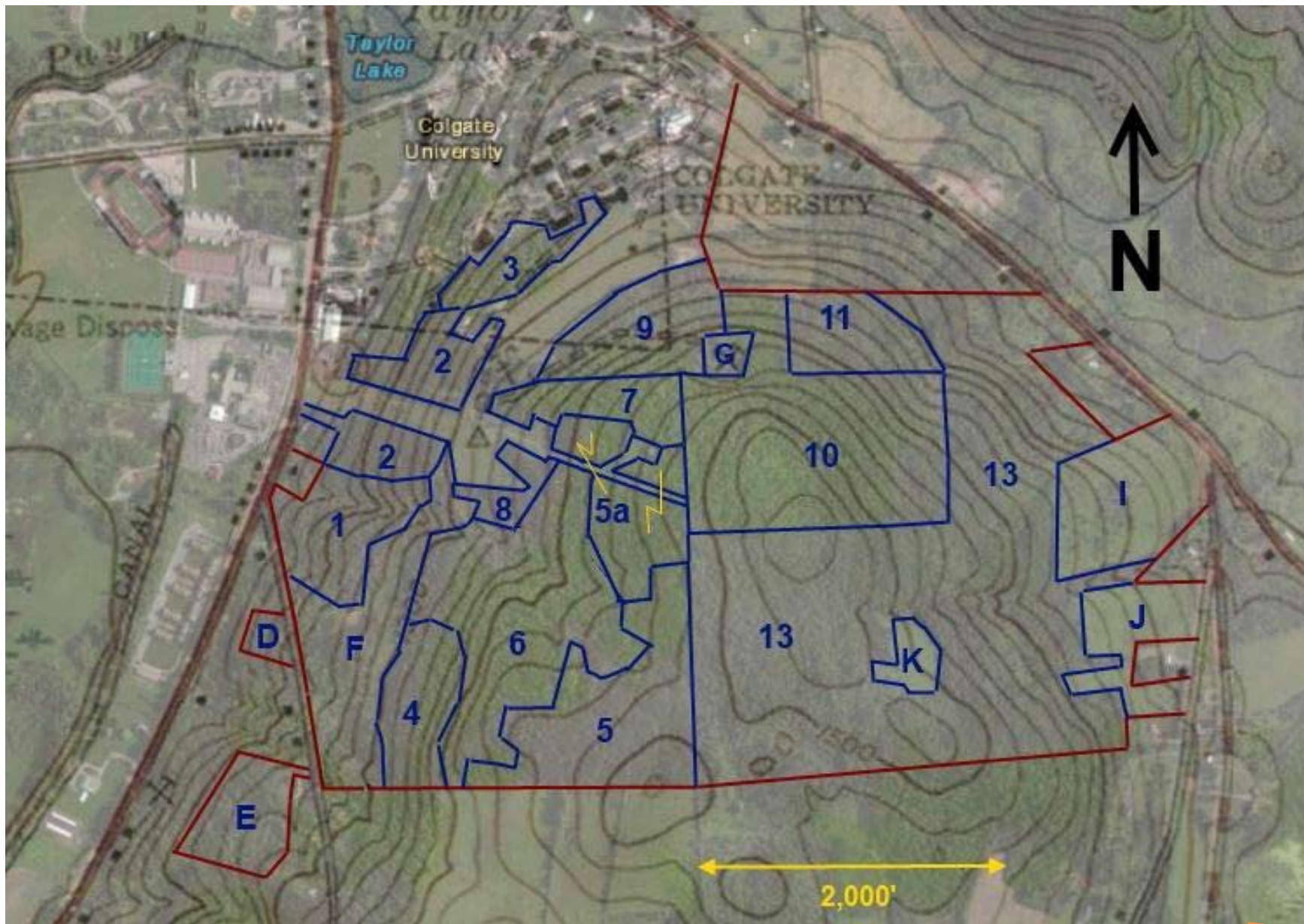
Pearson, Timothy R.H.; Brown, Sandra L.; Birdsey, Richard A. 2007. *Measurement guidelines for the sequestration of forest carbon*. Gen. Tech. Rep. NRS-18. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 42 p.

Smith, James E.; Heath, Linda S.; Skog, Kenneth E.; Birdsey, Richard A. 2006. *Methods for calculating forest ecosystem and harvested carbon with standard estimates for forest types of the United States*. Gen. Tech. Rep. NE-343. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. 216 p.

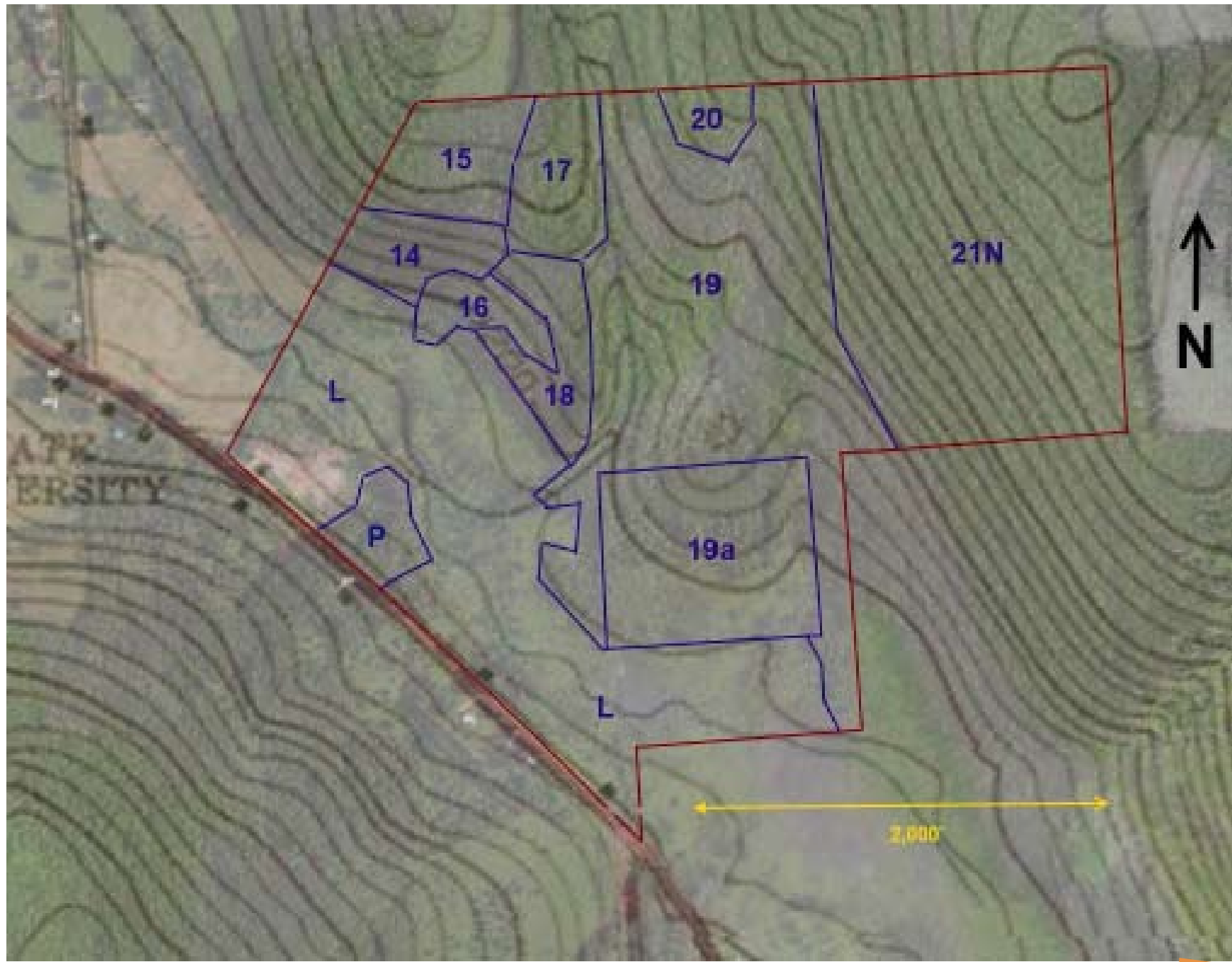


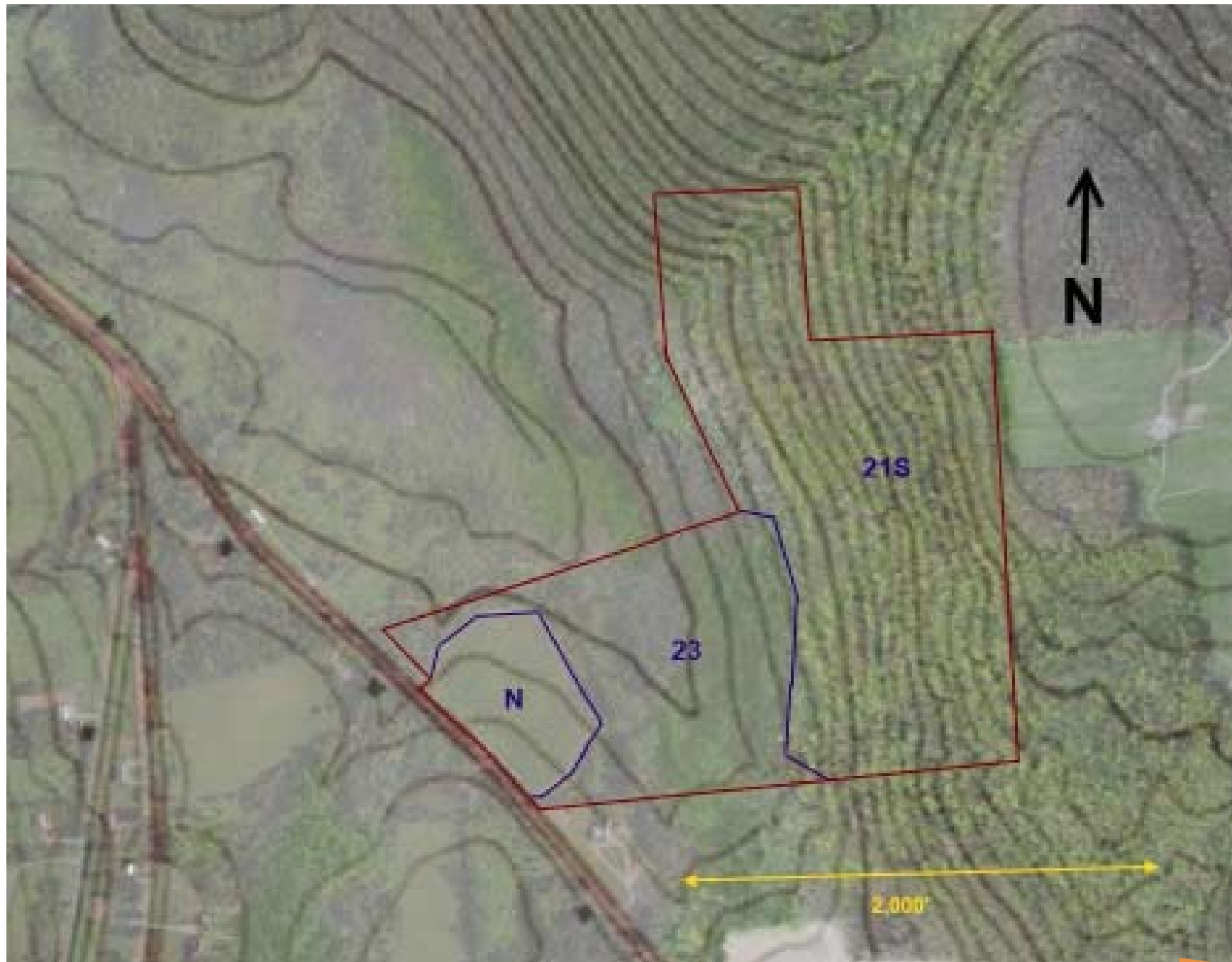
APPENDIX A: PARCEL AND MANAGEMENT UNIT MAPS

CAMPUS PARCEL

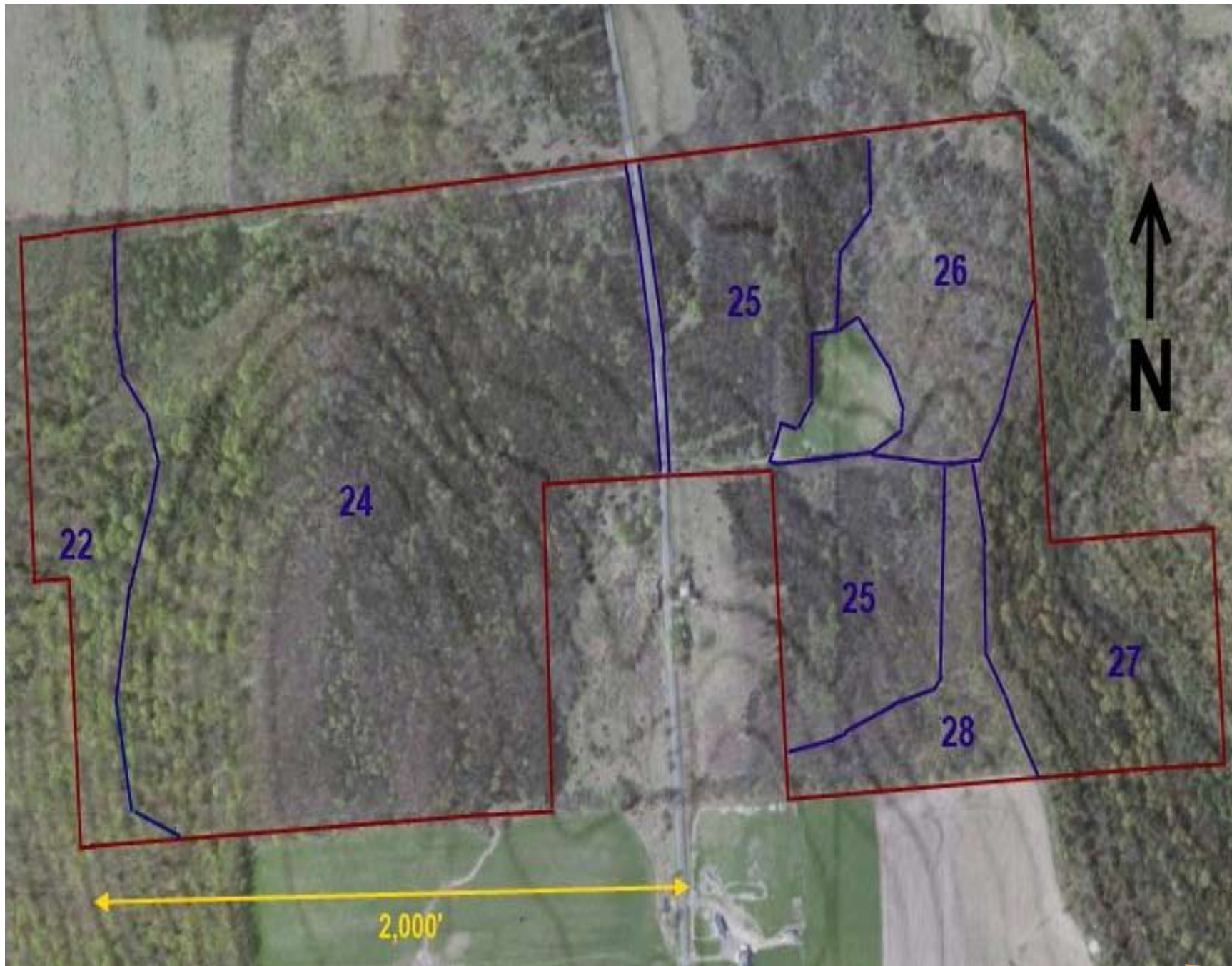


HAMILTON STREET NORTH

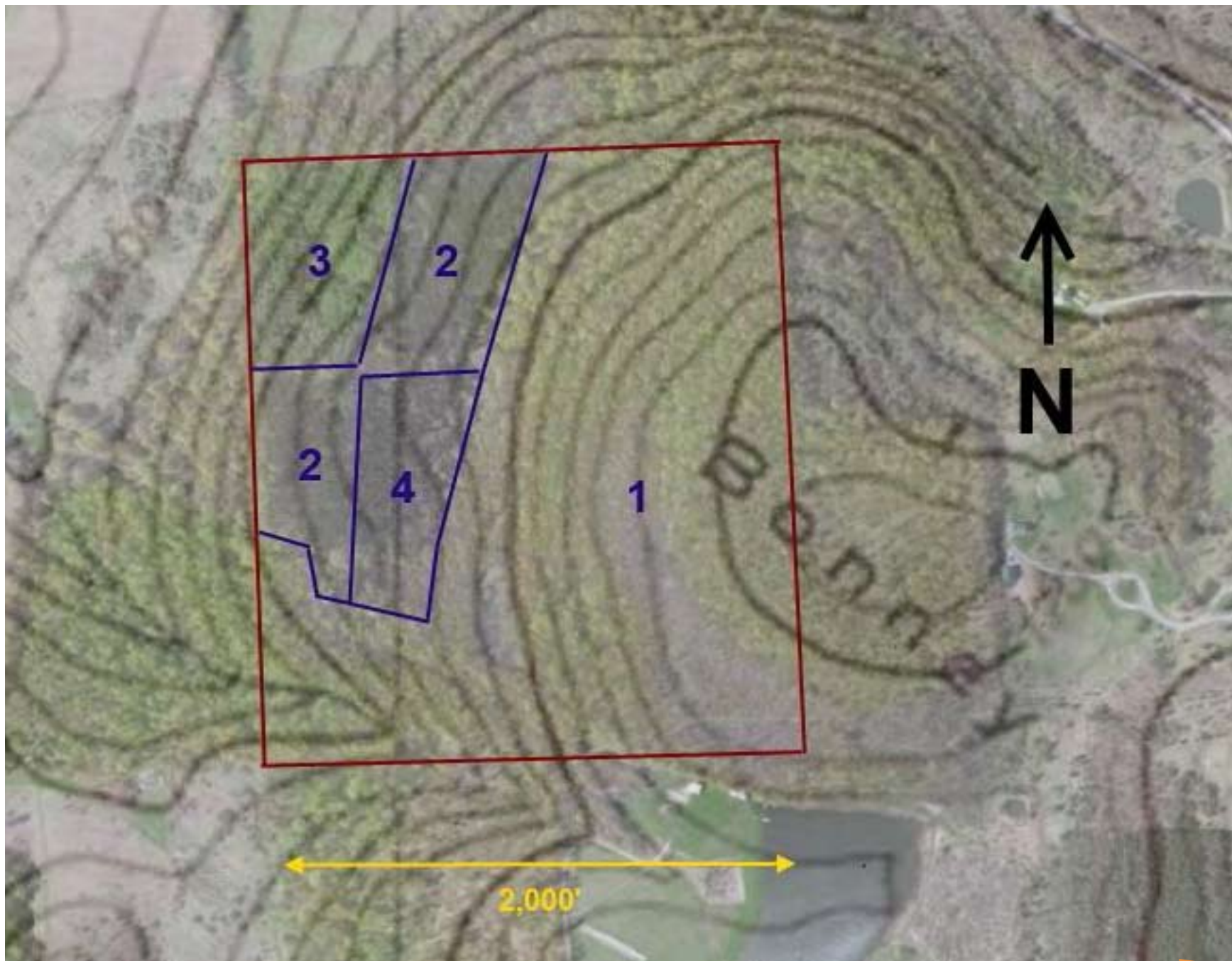




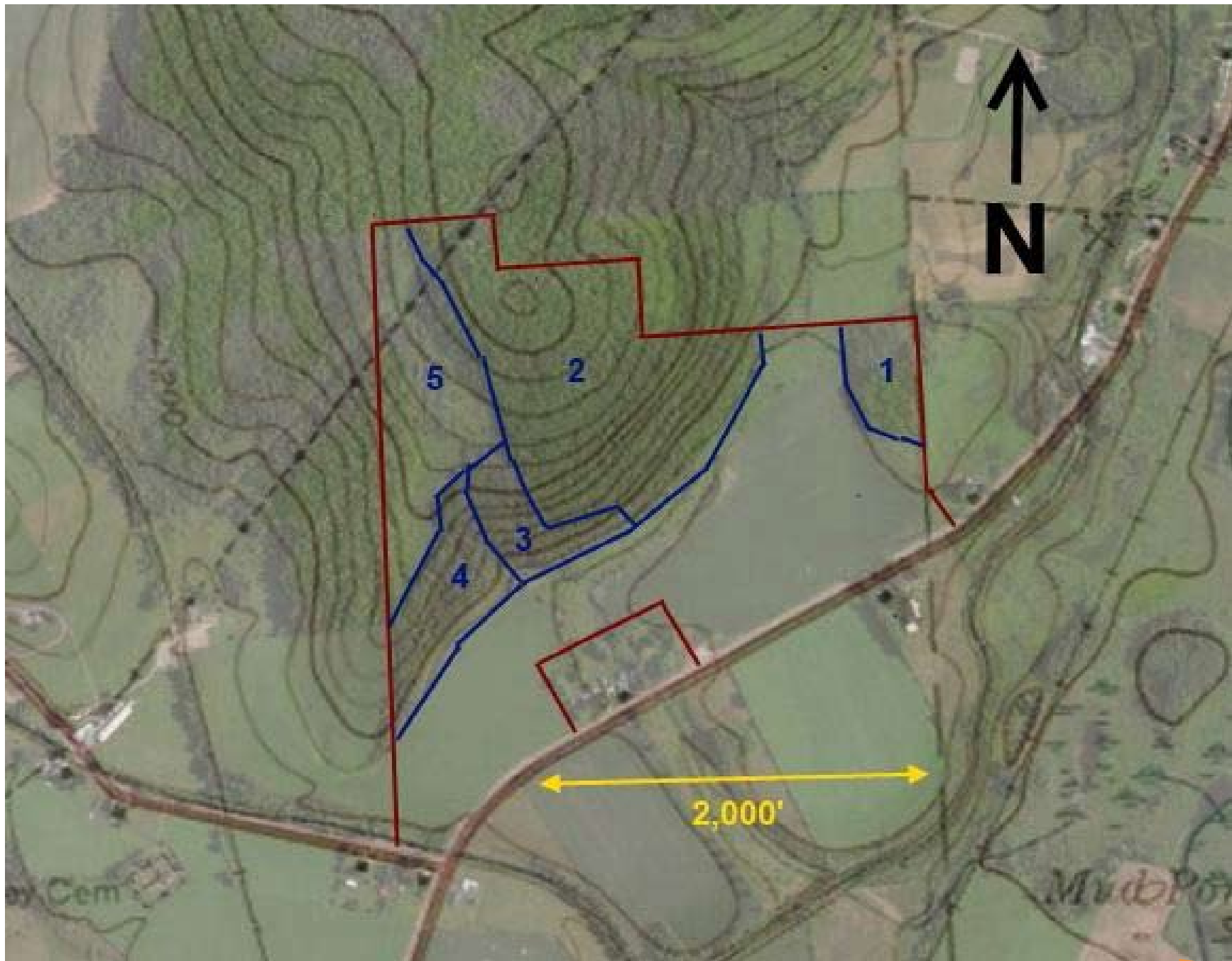
BEATTIE RESERVE



BONNEY HILL



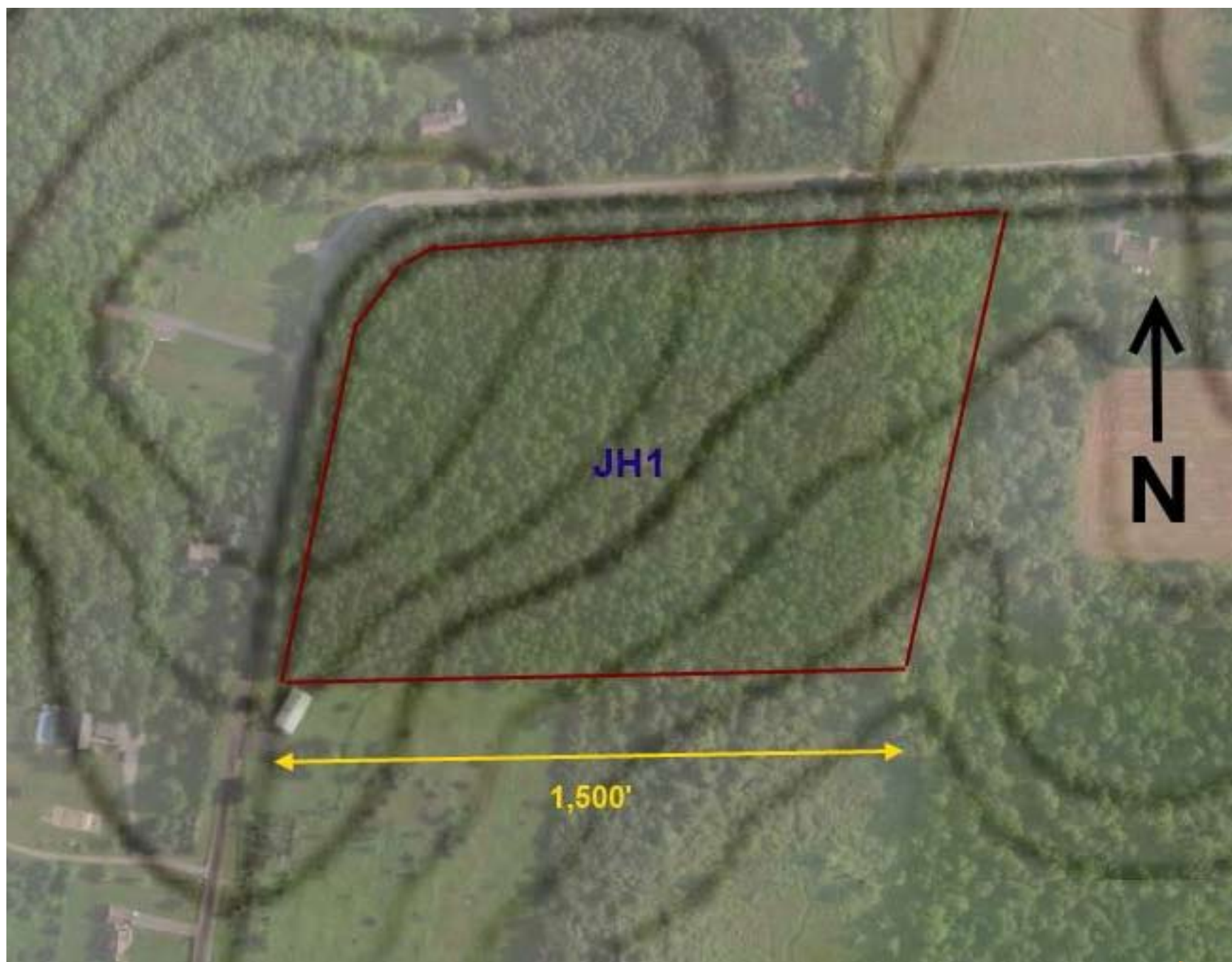
PARKER FARM



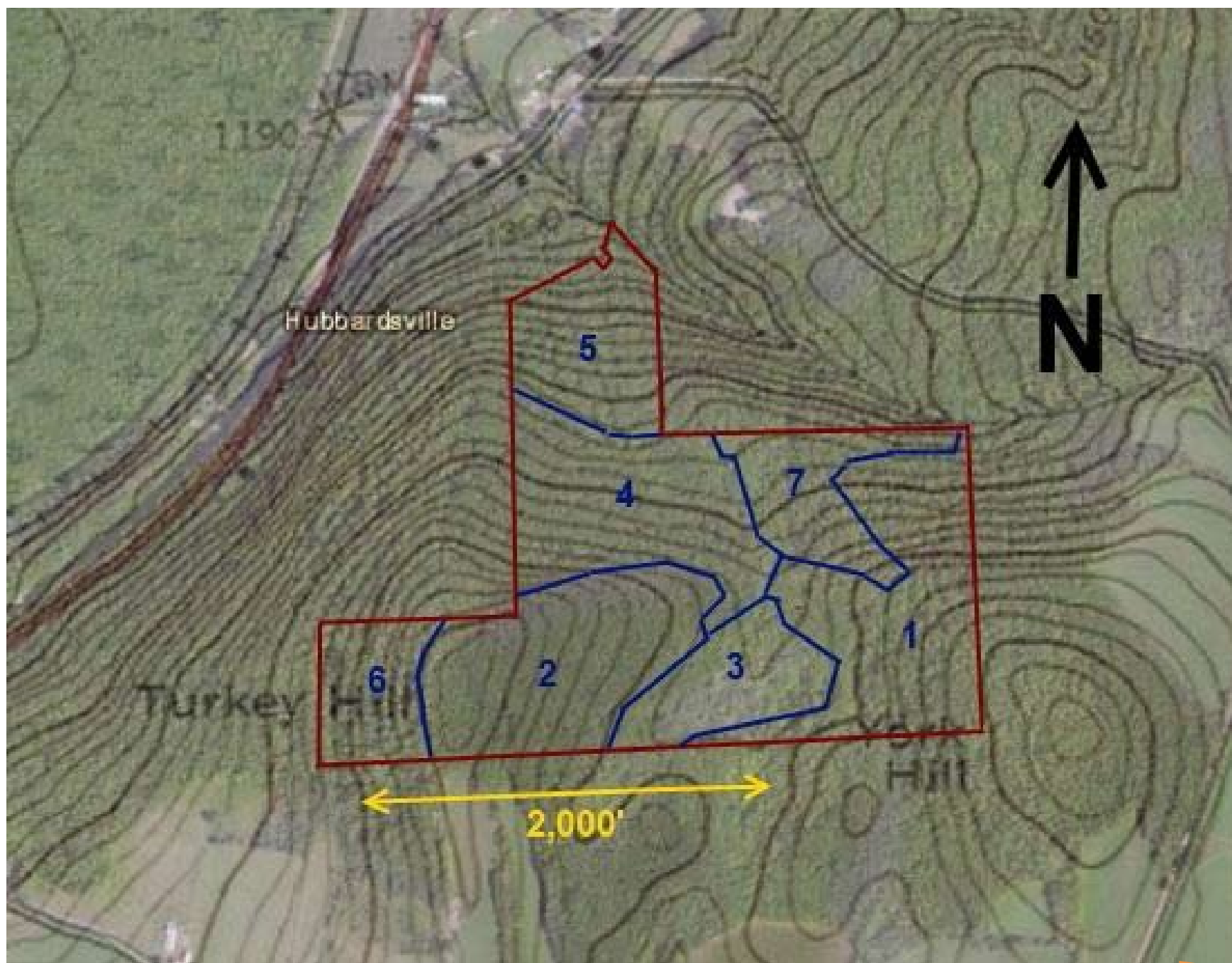
BEWKES CENTER

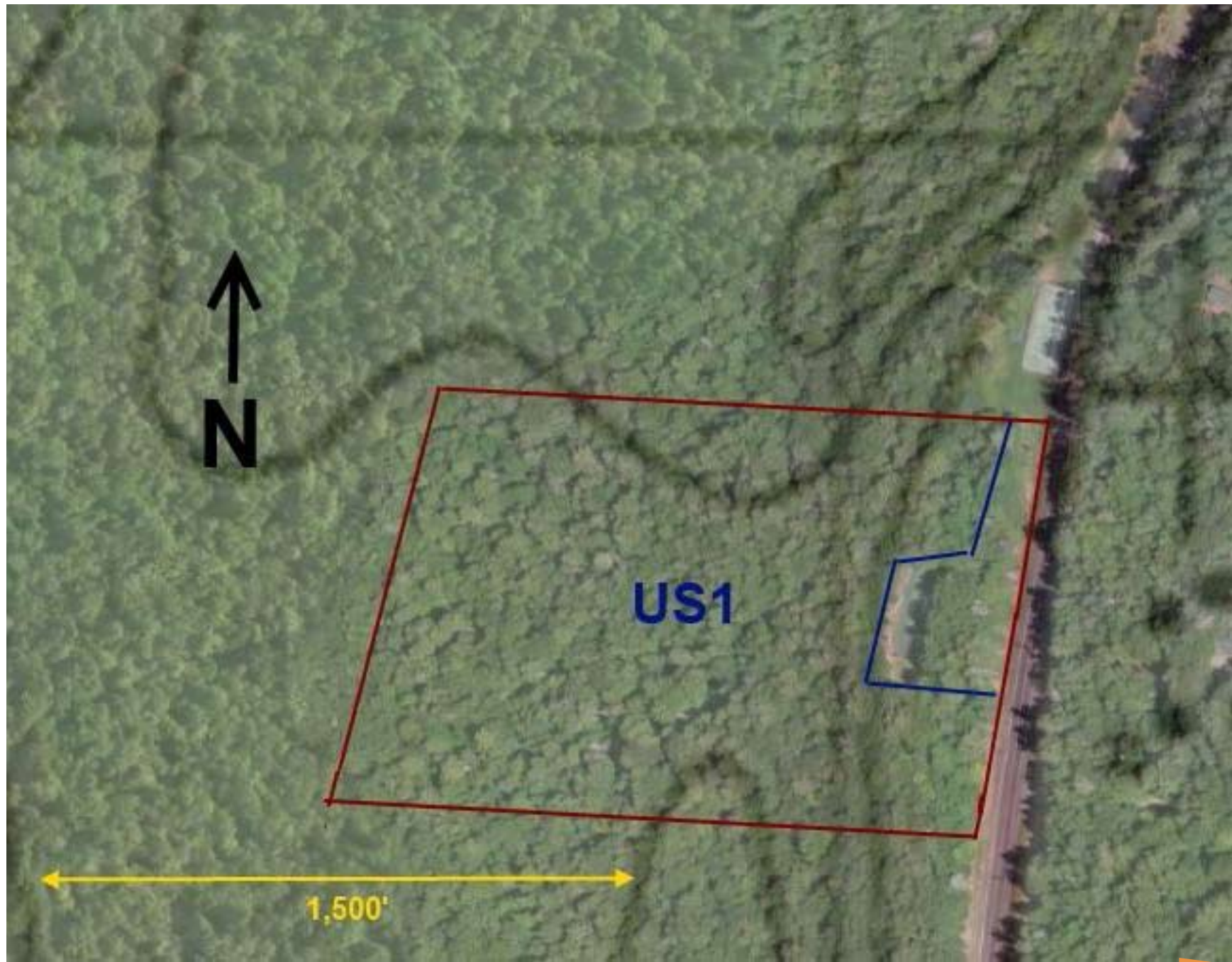


JOHNNYCAKE HILL



TURKEY HILL





APPENDIX B: SAMPLE PLOT DATA SHEETS

SPECIES CODES

COMMON NAME	CODE	COMMON NAME	CODE	COMMON NAME	CODE
commercial softwood (Other)	OSW	striped maple	STM	cucumbertree	CUC
commercial hardwood (Other)	OHW	red maple	RM	red mulberry	MUL
fir sp.	FIR	silver maple	SVM	eastern hophornbeam	OST
balsam fir	BF	sugar maple	SM	sycamore	AS
Atlantic white cedar	AWC	mountain maple	MM	balsam poplar	BP
eastern redcedar	ERC	serviceberry	SVB	eastern cottonwood	EC
larch (introduced)	L	yellow birch	YB	bigtooth aspen	BTA
tamarack (native)	TAM	sweet birch	SB	quaking aspen	QA
spruce	S	paper birch	PB	pin cherry	PNC
Norway spruce	NS	gray birch	GB	black cherry	BC
white spruce	WS	American hornbeam/musclewood	AHB	chokecherry	CC
black spruce	BS	bitternut hickory	BH	white oak	WO
red spruce	RS	pignut hickory	PH	swamp white oak	SWO
jack pine	JP	shagbark hickory	SGH	northern pin oak	NPO
spruce pine	SSP	American chestnut	ACN	chestnut oak	CO
longleaf pine	LLP	American beech	AB	northern red oak	NRO
red pine	REP	white ash	WA	black oak	BO
eastern white pine	EWP	black ash	BA	black locust	BL
Scotch pine	SCP	green ash	GA	black willow	BWL
Douglas-fir	DF	honeylocust	HL	American mountain ash	AMA
northern white cedar	NWC	American holly	HOL	American basswood	BAS
eastern hemlock	EH	butternut	BUT	American elm	AEL
boxelder	BXM	black walnut	BW	rock elm	REL
black maple	BM	yellow poplar	YP		



Colgate University Forest Carbon Data Sheet Date: 4/12/18

Parcel: 002 Plot ID: 001 Waypoint #: 039

Species	DBH	Species	DBH	Species	DBH
1 WS 0.2	31			61	
2 WS 10.1	32			62	
3 WA 3.4	33			63	
4 WS 10.0	34			64	
5 WS 5.6	35			65	
6 WA 15.1	36			66	
7 WS 7.2	37			67	
8 WS 3.2	38			68	
9 AP 3.2	39			69	
10 WS 11.0	40			70	
11 WS 6.2	41			71	
12 WS 14.8	42			72	
13 WA 7.2	43			73	
14 WA 4.2	44			74	
15 WS 1.8	45			75	
16 AP 9.0	46			76	
17	47			77	
18	48			78	
19	49			79	
20	50			80	
21	51			81	
22	52			82	
23	53			83	
24	54			84	
25	55			85	
26	56			86	
27	57			87	
28	58			88	
29	59			89	
30	60			90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/12/18

Parcel: 002 Plot ID: 002 Waypoint #: 033

Species	DBH	Species	DBH	Species	DBH
1 GH 10.1	31			61	
2 FH 3.0	32			62	
3 FH 7.0	33			63	
4 GH 11.0	34			64	
5 FH 6.1	35			65	
6 FH 7.4	36			66	
7 FH 4.8	37			67	
8 RC 12.0	38			68	
9 AH 3.0	39			69	
10 AH 4.0	40			70	
11 RC 9.8	41			71	
12 RW 5.0	42			72	
13 RW 3.2	43			73	
14 RC 4.3	44			74	
15 GH 8.2	45			75	
16 WA 19.0	46			76	
17 RW 11.0	47			77	
18 BC 14.3	48			78	
19 SM 4.0	49			79	
20 BC 8.5	50			80	
21 BC 8.4	51			81	
22 FH 11.9	52			82	
23 BC 14.6	53			83	
24 RC 2.5	54			84	
25 RA 12.0	55			85	
26 FH 7.3	56			86	
27 FH 4.2	57			87	
28 FH 13.0	58			88	
29 FH 8.0	59			89	
30	60			90	

Notes: stake missing and reset

Colgate University Forest Carbon Data Sheet Date: 4/12/18

Parcel: 002 Plot ID: 003 Waypoint #: 030

Species	DBH	Species	DBH	Species	DBH
1 FH 10.9	31			61	
2 WA 8.7	32			62	
3 YB 8.6	33			63	
4 YB 9.9	34			64	
5 FH 7.2	35			65	
6 WA 7.6	36			66	
7 FH 10.6	37			67	
8 WA 10.2	38			68	
9 YB 8.6	39			69	
10 FH 13.4	40			70	
11 FH 8.1	41			71	
12 FH 8.5	42			72	
13 YB 12.0	43			73	
14 WA 4.2	44			74	
15 SM 8.3	45			75	
16 RC 8.2	46			76	
17 SM 11.9	47			77	
18 WA 9.0	48			78	
19 WA 15.0	49			79	
20 SM 3.2	50			80	
21 RC 6.0	51			81	
22 AH 3.1	52			82	
23 YB 13.0	53			83	
24 AH 4.2	54			84	
25 FH 13.0	55			85	
26 FH 10.7	56			86	
27 YB 8.4	57			87	
28 YB 10.3	58			88	
29 YB 12.2	59			89	
30 FH 7.0	60			90	

Notes: stake missing, reset; stake was moved back

Colgate University Forest Carbon Data Sheet Date: 4/12/18

Parcel: 002 Plot ID: 004 Waypoint #: 057

Species	DBH	Species	DBH	Species	DBH
1 FH 14.7	31			61	
2 FH 18.2	32			62	
3 FH 17.9	33			63	
4 FH 17.7	34			64	
5 FH 18.0	35			65	
6 FH 19.9	36			66	
7 FH 20.6	37			67	
8 FH 23.6	38			68	
9 YB 7.1	39			69	
10 YB 9.9	40			70	
11 YB 11.2	41			71	
12 YB 4.7	42			72	
13 YB 12.6	43			73	
14 YB 7.2	44			74	
15 YB 10.3	45			75	
16 YB 5.4	46			76	
17 YB 9.9	47			77	
18 CST 11.5	48			78	
19 FH 21.2	49			79	
20 SM 8.5	50			80	
21 RC 17.4	51			81	
22 YB 10.8	52			82	
23 YB 11.0	53			83	
24 YB 7.6	54			84	
25	55			85	
26	56			86	
27	57			87	
28	58			88	
29	59			89	
30	60			90	

Notes: stake removed, but found; need to mark data

Colgate University Forest Carbon Data Sheet Date: 4/12/18

Parcel: 002 Plot ID: 005 Waypoint #: 057

Species	DBH	Species	DBH	Species	DBH
1 FH 18.5	31			61	
2 FH 20.6	32			62	
3 FH 14.7	33			63	
4 FH 19.8	34			64	
5 FH 18.6	35			65	
6 FH 15.0	36			66	
7 YB 14.8	37			67	
8 FH 12.4	38			68	
9 FH 11.5	39			69	
10	40			70	
11	41			71	
12	42			72	
13	43			73	
14	44			74	
15	45			75	
16	46			76	
17	47			77	
18	48			78	
19	49			79	
20	50			80	
21	51			81	
22	52			82	
23	53			83	
24	54			84	
25	55			85	
26	56			86	
27	57			87	
28	58			88	
29	59			89	
30	60			90	

Notes: stake missing; root (plot by creek)

Colgate University Forest Carbon Data Sheet Date: 4/12/18

Parcel: 002 Plot ID: 006 Waypoint #: 057

Species	DBH	Species	DBH	Species	DBH
1 WA 14.8	31			61	
2 WA 6.5	32			62	
3 WA 4.7	33			63	
4 WA 6.3	34			64	
5 WA 9.7	35			65	
6 WA 3.2	36			66	
7 FLM 7.6	37			67	
8 WA 9.4	38			68	
9 WS 8.6	39			69	
10 WA 9.0	40			70	
11 WA 9.3	41			71	
12 WA 14.1	42			72	
13 FLM 5.6	43			73	
14 WA 16.0	44			74	
15 WA 9.3	45			75	
16 WA 6.0	46			76	
17	47			77	
18	48			78	
19	49			79	
20	50			80	
21	51			81	
22	52			82	
23	53			83	
24	54			84	
25	55			85	
26	56			86	
27	57			87	
28	58			88	
29	59			89	
30	60			90	

Notes:



Colgate University Forest Carbon Data Sheet Date: 4/17/18

Parcel: BR Plot ID: 007 Waypoint #: 036

Species	DBH	Species	DBH	Species	DBH
1 WS 7.4	31			61	
2 WS 7.5	32			62	
3 WS 6.4	33			63	
4 WS 11.6	34			64	
5 WS 8.2	35			65	
6 WS 7.5	36			66	
7 WS 8.1	37			67	
8 WS 12.5	38			68	
9 WS 5.7	39			69	
10 WS 6.8	40			70	
11 WS 7.5	41			71	
12 WS 13.5	42			72	
13 WA 4.2	43			73	
14 WA 7.5	44			74	
	45			75	
	46			76	
	47			77	
	48			78	
	49			79	
	50			80	
	51			81	
	52			82	
	53			83	
	54			84	
	55			85	
	56			86	
	57			87	
	58			88	
	59			89	
	60			90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/17/18

Parcel: BR Plot ID: 008 Waypoint #: 032

Species	DBH	Species	DBH	Species	DBH
1 WA 12.4	31			61	
2 WS 6.7	32			62	
3 WS 5.0	33			63	
4 WS 5.2	34			64	
5 WS 7.9	35			65	
	36			66	
	37			67	
	38			68	
	39			69	
	40			70	
	41			71	
	42			72	
	43			73	
	44			74	
	45			75	
	46			76	
	47			77	
	48			78	
	49			79	
	50			80	
	51			81	
	52			82	
	53			83	
	54			84	
	55			85	
	56			86	
	57			87	
	58			88	
	59			89	
	60			90	

Notes: harvested area; stake replaced

Colgate University Forest Carbon Data Sheet Date: 4/17/18

Parcel: BR Plot ID: 009 Waypoint #: 020

Species	DBH	Species	DBH	Species	DBH
1				61	
2				62	
3				63	
4				64	
5				65	
6				66	
7				67	
8				68	
9				69	
10				70	
11				71	
12				72	
13				73	
14				74	
15				75	
16				76	
17				77	
18				78	
19				79	
20				80	
21				81	
22				82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes: harvested area; stake replaced; leaving GA region (DBH)

Colgate University Forest Carbon Data Sheet Date: 4/17/18

Parcel: BR Plot ID: 010 Waypoint #: 027

Species	DBH	Species	DBH	Species	DBH
1 WA 20.4	31			61	
2 BA 9.1	32			62	
3 BA 11.8	33			63	
4 EM 10.5	34			64	
5 RM 6.2	35			65	
6 RM 5.0	36			66	
7 RM 7.1	37			67	
8 RM 4.1	38			68	
9 RM 7.5	39			69	
10 RM 11.6	40			70	
	41			71	
	42			72	
	43			73	
	44			74	
	45			75	
	46			76	
	47			77	
	48			78	
	49			79	
	50			80	
	51			81	
	52			82	
	53			83	
	54			84	
	55			85	
	56			86	
	57			87	
	58			88	
	59			89	
	60			90	

Notes: harvested area; stake found!

Colgate University Forest Carbon Data Sheet Date: 4/17/18

Parcel: BR Plot ID: 011 Waypoint #: 025

Species	DBH	Species	DBH	Species	DBH
1 AR 5.0	31			61	
2 AR 2.6	32			62	
3 AR 6.3	33			63	
4 AR 16.7	34			64	
5 AB 7.0	35			65	
6 RM 17.7	36			66	
7 EH 4.2	37			67	
8 EH 5.4	38			68	
9 EH 24.8	39			69	
10 SM 23.8	40			70	
11 SM 13.2	41			71	
12 SM 16.2	42			72	
13 WS 5.9	43			73	
14 AB 15.2	44			74	
15 AB 14.0	45			75	
16 EH 7.6	46			76	
17 EH 6.0	47			77	
18 EH 5.4	48			78	
	49			79	
	50			80	
	51			81	
	52			82	
	53			83	
	54			84	
	55			85	
	56			86	
	57			87	
	58			88	
	59			89	
	60			90	

Notes: partially harvested for year

Colgate University Forest Carbon Data Sheet Date: 4/17/18

Parcel: BR Plot ID: 012 Waypoint #: 026

Species	DBH	Species	DBH	Species	DBH
1 EH 17.2	31			61	
2 SM 16.2	32			62	
3 SM 6.9	33			63	
4 WA 4.5	34			64	
5 WA 19.6	35			65	
6 WA 8.0	36			66	
7 OSJ 6.7	37			67	
8 WA 22.9	38			68	
9 SE 6.3	39			69	
10 SM 20.8	40			70	
11 AR 4.8	41			71	
	42			72	
	43			73	
	44			74	
	45			75	
	46			76	
	47			77	
	48			78	
	49			79	
	50			80	
	51			81	
	52			82	
	53			83	
	54			84	
	55			85	
	56			86	
	57			87	
	58			88	
	59			89	
	60			90	

Notes: stake missing; replaced by ramp



Colgate University Forest Carbon Data Sheet Date: 9/17/18

Parcel: 03R		Plot ID: 013		Waypoint #: 024	
Species	DBH	Species	DBH	Species	DBH
1	AB 4.6	31	EH 12.7	61	
2	EH 4.3	32		62	
3	BC 16.0	33		63	
4	EH 8.7	34		64	
5	SM 8.7	35		65	
6	AB 8.8	36		66	
7	SM 6.5	37		67	
8	RM 14.5	38		68	
9	RM 14.4	39		69	
10	EH 10.0	40		70	
11	SB 11.2	41		71	
12	BC 12.1	42		72	
13	SM 5.0	43		73	
14	SA 3.8	44		74	
15	EH 2.4	45		75	
16	SM 7.2	46		76	
17	SM 7.8	47		77	
18	QA 16.4	48		78	
19	QB 13.0	49		79	
20	EH 4.6	50		80	
21	EH 13.3	51		81	
22	AB 5.2	52		82	
23	SM 13.8	53		83	
24	SM 10.8	54		84	
25	EH 7.6	55		85	
26	EH 6.8	56		86	
27	RM 24.4	57		87	
28	EH 12.4	58		88	
29	EH 6.2	59		89	
30	EH 7.7	60		90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 9/17/18

Parcel: BR		Plot ID: 014		Waypoint #: 025	
Species	DBH	Species	DBH	Species	DBH
1	SM 24.5	31		61	
2	OST 6.7	32		62	
3	RC 8.7	33		63	
4	SM 18.7	34		64	
5	EH 16.4	35		65	
6	RM 15.8	36		66	
7	WA 3.2	37		67	
8	AB 4.3	38		68	
9	SB 2.5	39		69	
10	SM 30.9	40		70	
11	WA 5.3	41		71	
12	WA 4.4	42		72	
13	OST 5.6	43		73	
14	OST 4.6	44		74	
15	WA 2.2	45		75	
16	WA 7.7	46		76	
17	WA 6.0	47		77	
18	WA 5.6	48		78	
19	WA 7.0	49		79	
20	WA 4.0	50		80	
21	EH 16.6	51		81	
22	SM 23.5	52		82	
23	RC 8.2	53		83	
24	OST 3.2	54		84	
25		55		85	
26		56		86	
27		57		87	
28		58		88	
29		59		89	
30		60		90	

Notes: State missing & replaced

Colgate University Forest Carbon Data Sheet Date: 9/17/18

Parcel: BR		Plot ID: 015		Waypoint #: 026	
Species	DBH	Species	DBH	Species	DBH
1	WA 7.7	31	SM 8.2	61	
2	WA 5.7	32	WA 8.8	62	
3	WA 8.3	33	WA 8.0	63	
4	WA 4.9	34	WA 5.2	64	
5	WA 4.5	35	SM 7.2	65	
6	WA 9.7	36	SM 11.4	66	
7	WA 12.7	37	WA 4.6	67	
8	WA 46.0	38	WA 12.0	68	
9	WA 15.1	39	WA 3.0	69	
10	SM 5.1	40	WA 10.5	70	
11	WA 11.9	41		71	
12	SM 5.2	42		72	
13	SM 1.6	43		73	
14	WA 5.2	44		74	
15	SM 8.5	45		75	
16	WA 6.6	46		76	
17	RM 4.5	47		77	
18	SM 5.8	48		78	
19	WA 5.1	49		79	
20	WA 8.7	50		80	
21	WA 11.0	51		81	
22	WA 5.9	52		82	
23	WA 11.6	53		83	
24	WA 10.7	54		84	
25	WA 4.0	55		85	
26	SM 7.8	56		86	
27	WA 9.0	57		87	
28	SM 7.0	58		88	
29	WA 4.5	59		89	
30	WA 6.7	60		90	

Notes: State missing & replaced

Colgate University Forest Carbon Data Sheet Date: 9/17/18

Parcel: BR		Plot ID: 016		Waypoint #: 027	
Species	DBH	Species	DBH	Species	DBH
1	WA 9.0	31		61	
2	WA 5.2	32		62	
3	WA 3.1	33		63	
4	WA 3.7	34		64	
5	WA 12.4	35		65	
6	WA 8.0	36		66	
7	WA 7.8	37		67	
8	WA 5.0	38		68	
9	WA 16.1	39		69	
10	WA 5.6	40		70	
11	WA 13.5	41		71	
12	WA 8.1	42		72	
13	WA 4.2	43		73	
14	WA 9.0	44		74	
15	WA 8.4	45		75	
16	WA 5.8	46		76	
17	WA 10.8	47		77	
18	WA 4.2	48		78	
19	WA 4.4	49		79	
20	WA 7.4	50		80	
21	WA 9.5	51		81	
22	WA 12.1	52		82	
23		53		83	
24		54		84	
25		55		85	
26		56		86	
27		57		87	
28		58		88	
29		59		89	
30		60		90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 9/17/18

Parcel: BR		Plot ID: 017		Waypoint #: 028	
Species	DBH	Species	DBH	Species	DBH
1	EH 17.7	31		61	
2	QA 10.4	32		62	
3	EH 5.8	33		63	
4	WA 18.4	34		64	
5	EH 16.1	35		65	
6	EH 13.5	36		66	
7	EH 13.8	37		67	
8	EH 9.2	38		68	
9	EH 14.0	39		69	
10	EH 17.5	40		70	
11	RM 25.2	41		71	
12	WA 4.6	42		72	
13	SP 4.2	43		73	
14	EH 12.5	44		74	
15	EH 14.5	45		75	
16	EH 19.7	46		76	
17	EH 17.2	47		77	
18	EH 8.2	48		78	
19	SM 10.6	49		79	
20	EH 7.4	50		80	
21	EH 19.4	51		81	
22		52		82	
23		53		83	
24		54		84	
25		55		85	
26		56		86	
27		57		87	
28		58		88	
29		59		89	
30		60		90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 9/17/18

Parcel: BR		Plot ID: 018		Waypoint #: 029	
Species	DBH	Species	DBH	Species	DBH
1	WA 7.7	31		61	
2	WA 5.2	32		62	
3	WA 5.9	33		63	
4	WA 8.5	34		64	
5	WA 9.1	35		65	
6	WA 8.0	36		66	
7	WA 9.8	37		67	
8	WA 15.8	38		68	
9	WA 19.1	39		69	
10	WA 3.0	40		70	
11	WA 3.0	41		71	
12	WA 4.6	42		72	
13	WA 6.2	43		73	
14	SM 7.8	44		74	
15	WA 7.7	45		75	
16	WA 11.0	46		76	
17		47		77	
18		48		78	
19		49		79	
20		50		80	
21		51		81	
22		52		82	
23		53		83	
24		54		84	
25		55		85	
26		56		86	
27		57		87	
28		58		88	
29		59		89	
30		60		90	

Notes: State missing & replaced; handwritten notes



Colgate University Forest Carbon Data Sheet Date: 4/24/16

Parcel: BH Plot ID: 071 Waypoint #: 067

Species	DBH	Species	DBH	Species	DBH	
1	WS	11.6	31	WA	10.6	61
2	WS	10.8	32	AC	6.6	62
3	WS	12.0	33	AF	7.4	63
4	WS	8.5	34			64
5	WS	10.4	35			65
6	WS	8.8	36			66
7	WS	9.6	37			67
8	WS	12.2	38			68
9	WS	9.2	39			69
10	WS	10.4	40			70
11	WS	9.5	41			71
12	WS	7.7	42			72
13	WS	9.2	43			73
14	WS	9.2	44			74
15	WS	6.5	45			75
16	WS	9.0	46			76
17			47			77
18			48			78
19			49			79
20			50			80
21			51			81
22			52			82
23			53			83
24			54			84
25			55			85
26			56			86
27			57			87
28			58			88
29			59			89
30			60			90

Notes: state missing; reset

Colgate University Forest Carbon Data Sheet Date: 4/24/16

Parcel: BH Plot ID: 072 Waypoint #: 069

Species	DBH	Species	DBH	Species	DBH	
1	REP	9.9	31	WA	10.5	61
2	REP	10.2	32	AC	22.4	62
3	REP	9.9	33	SM	3.2	63
4	REP	9.9	34			64
5	REP	8.2	35			65
6	REP	8.3	36			66
7	REP	10.3	37			67
8	REP	7.2	38			68
9	REP	7.2	39			69
10	REP	7.5	40			70
11	REP	10.0	41			71
12	REP	6.7	42			72
13	REP	9.9	43			73
14	REP	7.0	44			74
15	REP	10.1	45			75
16	REP	9.2	46			76
17	REP	7.5	47			77
18	REP	9.4	48			78
19	REP	9.0	49			79
20	REP	8.8	50			80
21	REP	10.4	51			81
22	REP	10.1	52			82
23	REP	12.8	53			83
24	REP	9.6	54			84
25	REP	10.4	55			85
26	REP	8.0	56			86
27	REP	9.5	57			87
28	REP	12.8	58			88
29			59			89
30			60			90

Notes: state missing; replace

Colgate University Forest Carbon Data Sheet Date: 4/27/16

Parcel: BH Plot ID: 073 Waypoint #: 068

Species	DBH	Species	DBH	Species	DBH	
1	WA	14.3	31			61
2	L	18.6	32			62
3	AC	16.6	33			63
4	L	12.3	34			64
5	L	8.0	35			65
6	L	9.0	36			66
7	SM	9.5	37			67
8	L	7.7	38			68
9	L	6.0	39			69
10	L	14.9	40			70
11	L	15.2	41			71
12	L	15.2	42			72
13	L	12.0	43			73
14	L	12.0	44			74
15	L	9.4	45			75
16	L	12.1	46			76
17	L	7.7	47			77
18	L	8.2	48			78
19	L	12.6	49			79
20	L	16.4	50			80
21	L	12.5	51			81
22	L	14.8	52			82
23	L	10.2	53			83
24	AC	5.6	54			84
25	L	4.7	55			85
26	L	14.6	56			86
27	L	10.0	57			87
28	L	14.9	58			88
29	L	14.0	59			89
30			60			90

Notes: state missing; replace

Colgate University Forest Carbon Data Sheet Date: 4/24/16

Parcel: BH Plot ID: 074 Waypoint #: 070

Species	DBH	Species	DBH	Species	DBH	
1	SM	12.4	31			61
2	SM	7.4	32			62
3	SM	12.6	33			63
4	SM	8.1	34			64
5	SM	9.4	35			65
6	SM	7.9	36			66
7	SM	16.8	37			67
8	SM	12.2	38			68
9	SM	10.5	39			69
10	SM	8.2	40			70
11	SM	7.0	41			71
12	SM	10.2	42			72
13	SM	11.8	43			73
14	SM	12.2	44			74
15	SM	14.1	45			75
16	SM	11.0	46			76
17	SM	10.8	47			77
18	SM	10.9	48			78
19	SM	11.4	49			79
20	SM	14.8	50			80
21	SM	14.0	51			81
22	SM	18.2	52			82
23	SM	11.2	53			83
24			54			84
25			55			85
26			56			86
27			57			87
28			58			88
29			59			89
30			60			90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/24/16

Parcel: BH Plot ID: 078 Waypoint #: 072

Species	DBH	Species	DBH	Species	DBH	
1	SM	13.5	31			61
2	SM	11.9	32			62
3	SM	24.0	33			63
4	SM	8.9	34			64
5	SM	10.2	35			65
6	SM	22.4	36			66
7	OST	8.0	37			67
8	SM	20.0	38			68
9	SM	14.1	39			69
10	SM	3.0	40			70
11	SM	12.0	41			71
12	SM	16.2	42			72
13	SM	13.8	43			73
14			44			74
15			45			75
16			46			76
17			47			77
18			48			78
19			49			79
20			50			80
21			51			81
22			52			82
23			53			83
24			54			84
25			55			85
26			56			86
27			57			87
28			58			88
29			59			89
30			60			90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/27/16

Parcel: BH Plot ID: 076 Waypoint #: 074

Species	DBH	Species	DBH	Species	DBH	
1	SM	7.8	31	SM	9.4	61
2	SM	5.8	32	WA	10.8	62
3	SM	2.7	33	SM	3.6	63
4	SM	5.0	34	SM	10.6	64
5	SM	8.0	35			65
6	SM	9.3	36			66
7	SM	4.2	37			67
8	SM	7.0	38			68
9	SM	6.9	39			69
10	WA	10.5	40			70
11	WA	16.1	41			71
12	SM	6.7	42			72
13	SM	5.8	43			73
14	SM	6.0	44			74
15	SM	3.9	45			75
16	SM	8.2	46			76
17	SM	4.8	47			77
18	SM	4.3	48			78
19	SM	6.8	49			79
20	SM	4.8	50			80
21	SM	6.4	51			81
22	SM	5.2	52			82
23	WA	7.9	53			83
24	SM	6.1	54			84
25	SM	9.6	55			85
26	SM	3.8	56			86
27	SM	6.1	57			87
28	SM	3.6	58			88
29	SM	7.7	59			89
30	SM	8.4	60			90

Notes: state missing; replace



Colgate University Forest Carbon Data Sheet Date: 4/2/16

Parcel: BH Plot ID: 077 Waypoint #: E77

Species	DBH	Species	DBH	Species	DBH
1	OST	11.7	31	OST	61
2	OST	5.2	32		62
3	OST	7.8	33		63
4	OST	8.8	34		64
5	OST	18.2	35		65
6	OST	8.0	36		66
7	WA	9.1	37		67
8	WA	12.8	38		68
9	WA	11.1	39		69
10	OST	8.0	40		70
11	OST	6.2	41		71
12	OST	9.1	42		72
13	SM	7.1	43		73
14	OST	3.0	44		74
15	SM	15.8	45		75
16	OST	8.6	46		76
17	OST	6.2	47		77
18	OST	4.0	48		78
19	SM	24.1	49		79
20	OST	5.2	50		80
21	SM	17.7	51		81
22	OST	3.6	52		82
23	OST	8.9	53		83
24	WA	14.7	54		84
25	OST	3.2	55		85
26	WA	6.3	56		86
27	AB	4.2	57		87
28	AB	12.0	58		88
29	OST	14.8	59		89
30	OST	3.5	60		90

Notes: 5 to be missing, 1 replaced

Colgate University Forest Carbon Data Sheet Date: 4/2/16

Parcel: BH Plot ID: 102 Waypoint #: B71

Species	DBH	Species	DBH	Species	DBH
1	SM	8.6	31		61
2	SM	9.9	32		62
3	SM	12.9	33		63
4	SM	11.1	34		64
5	SM	16.4	35		65
6	SM	12.9	36		66
7	SM	12.0	37		67
8	SM	6.7	38		68
9	SM	11.2	39		69
10	SM	20	40		70
11	SM	16.9	41		71
12	SM	11.4	42		72
13	SM	2.4	43		73
14	SM	6.6	44		74
15	SM	8.0	45		75
16	SM	10.5	46		76
17	SM	5.2	47		77
18	SM	20.3	48		78
19	SM	8.9	49		79
20	WA	8.2	50		80
21	SM	8.1	51		81
22	SM	8.5	52		82
23	SM	11.4	53		83
24	SM	8.2	54		84
25	SM	9.6	55		85
26	SM	18.1	56		86
27	SM	9.7	57		87
28			58		88
29			59		89
30			60		90

Notes: 5 to be missing, 1 replaced

Colgate University Forest Carbon Data Sheet Date: 4/16/16

Parcel: Campus Plot ID: 659 Waypoint #: 934

Species	DBH	Species	DBH	Species	DBH
1	SM	28.4	31		61
2	SM	3.1	32		62
3	SM	9.2	33		63
4	SM	7.5	34		64
5	SM	3.8	35		65
6	SM	5.1	36		66
7	SM	3.3	37		67
8	WA	8.1	38		68
9	SM	15.5	39		69
10	SM	5.2	40		70
11	SM	20.5	41		71
12	SM	5.2	42		72
13	SM	22.6	43		73
14	SM	25.1	44		74
15	SM	5.2	45		75
16	SM	3.8	46		76
17	SM	20.9	47		77
18	SM	5.3	48		78
19	SM	6.2	49		79
20			50		80
21			51		81
22			52		82
23			53		83
24			54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/16/16

Parcel: Campus Plot ID: 025 Waypoint #: 932

Species	DBH	Species	DBH	Species	DBH
1	SM	23.1	31		61
2	SM	12.8	32		62
3	SM	7.3	33		63
4	SM	22.6	34		64
5	SM	14.9	35		65
6	WA	5.1	36		66
7	SM	3.1	37		67
8	SM	4.0	38		68
9	SM	17.3	39		69
10	SM	4.2	40		70
11	SM	22.2	41		71
12	SM	3.3	42		72
13	SM	4.5	43		73
14	SM	4.8	44		74
15	SM	26.0	45		75
16	SM	3.6	46		76
17	SM	18.0	47		77
18	SM	5.9	48		78
19	SM	4.5	49		79
20	SM	3.5	50		80
21	SM	3.5	51		81
22	SM	4.5	52		82
23			53		83
24			54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/16/16

Parcel: Campus Plot ID: 026 Waypoint #: 936

Species	DBH	Species	DBH	Species	DBH
1	SM	20.3	31		61
2	SM	16.8	32		62
3	OST	6.2	33		63
4	SM	16.8	34		64
5	SM	12.0	35		65
6	SM	24.2	36		66
7	SM	18.0	37		67
8	WA	16.7	38		68
9	SM	12.9	39		69
10	WA	15.3	40		70
11	SM	15.5	41		71
12	SM	22.6	42		72
13			43		73
14			44		74
15			45		75
16			46		76
17			47		77
18			48		78
19			49		79
20			50		80
21			51		81
22			52		82
23			53		83
24			54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/16/16

Parcel: Campus Plot ID: 027 Waypoint #: CE-13

Species	DBH	Species	DBH	Species	DBH
1	OST	4.9	31		61
2	OST	7.4	32		62
3	SM	3.3	33		63
4	SM	5.5	34		64
5	SM	20.5	35		65
6	SM	4.6	36		66
7	OST	4.6	37		67
8	SM	5.6	38		68
9	SM	3.5	39		69
10	OST	7.1	40		70
11	SM	3.6	41		71
12	SM	8.5	42		72
13	SM	15.3	43		73
14	SM	6.8	44		74
15	SM	18.6	45		75
16	OST	8.6	46		76
17	SM	6.5	47		77
18	SM	4.8	48		78
19			49		79
20			50		80
21			51		81
22			52		82
23			53		83
24			54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes:



Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: C-mp-5		Plot ID: 039		Waypoint #: 032	
Species	DBH	Species	DBH	Species	DBH
1	RM	9.6			
2	RM	5.0			
3	RM	12.8			
4	RM	12.5			
5	RM	18.2			
6	RM	10.2			
7	MS	9.2			
8	RM	8.2			
9	RM	6.4			
10	MS	6.1			
11	AB	3.5			
12	AB	3.1			
13	RM	4.6			
14	RM	13.6			
15	RM	13.0			
16	RM	19.3			
17	RM	6.4			
18	RM	8.0			
19	RM	14.7			
20	RM	6.7			
21	RM	7.6			
22	RM	4.2			
23	RM	16.7			
24	RM	6.9			
25	RM	15.5			
26	RM	13.3			
27					
28					
29					
30					

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: C-mp-5		Plot ID: 039		Waypoint #: 014	
Species	DBH	Species	DBH	Species	DBH
1	BC	16.0		SM	3.1
2	SM	4.9		REP	4.9
3	REP	4.6		SM	3.9
4	WA	10.7		SM	3.9
5	WA	12.7		REP	11.0
6	SM	7.9		SM	4.2
7	SM	6.4		SM	5.9
8	SM	5.4		BC	4.4
9	SM	5.7		BC	3.9
10	SM	4.2		SM	8.6
11	SM	3.5		WA	8.9
12	SM	4.5		WA	6.9
13	RM	6.8			
14	REP	13.4			
15	REP	11.7			
16	RM	3.4			
17	SM	4.0			
18	RM	5.9			
19	SM	3.7			
20	SM	3.8			
21	SM	3.3			
22	RM	6.2			
23	REP	3.5			
24	SM	3.7			
25	SM	3.1			
26	REP	8.6			
27	REP	8.6			
28	RM	5.7			
29	REP	9.7			
30	SM	14.6			

Notes: STATE MISSING & REPLACED

Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: C-mp-5		Plot ID: 030		Waypoint #: 005	
Species	DBH	Species	DBH	Species	DBH
1	SM	18.5			
2	BC	24.2			
3	SM	14.3			
4	SM	6.1			
5	REP	11.6			
6	REP	11.8			
7	REP	11.0			
8	REP	11.6			
9	REP	9.7			
10	BC	14.2			
11	REP	9.6			
12	REP	11.7			
13	BC	11.2			
14	WA	11.2			
15	REP	10.2			
16	BA	11.7			
17	REP	11.9			
18	REP	11.0			
19	REP	12.5			
20	REP	11.1			
21	REP	10.2			
22	REP	10.6			
23	REP	9.5			
24	REP	10.2			
25	REP	11.9			
26					
27					
28					
29					
30					

Notes: STATE MISSING & REPLACED

Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: C-mp-5		Plot ID: 041		Waypoint #: 002	
Species	DBH	Species	DBH	Species	DBH
1	MS	3.6		REP	8.8
2	WA	4.9		REP	8.0
3	REP	12.4		WA	3.6
4	REP	10.5		WA	6.1
5	REP	12.4		REP	7.0
6	REP	7.8		WA	5.7
7	REP	13.0		REP	7.4
8	REP	6.1		WA	4.0
9	REP	9.3		REP	11.2
10	REP	11.2		WA	3.9
11	REP	8.8		WA	2.4
12	REP	10.6		WA	4.0
13	REP	8.7		REP	8.9
14	REP	10.7		REP	6.9
15	REP	10.2		MS	6.2
16	WA	4.0		REP	8.2
17	WA	4.1		REP	8.5
18	WA	4.7		REP	10.3
19	BC	3.8		WA	3.8
20	WA	3.7			
21	WA	5.8			
22	WA	4.8			
23	HAW	3.8			
24	WA	7.0			
25	BC	8.8			
26	REP	10.4			
27	HAW	3.5			
28	REP	8.9			
29	REP	8.1			
30	WA	6.1			

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: C-mp-5		Plot ID: 042		Waypoint #: 900	
Species	DBH	Species	DBH	Species	DBH
1	REP	7.6		WA	3.5
2	REP	8.2		REP	9.4
3	REP	9.4		WA	5.2
4	HAW	4.1		REP	9.8
5	HAW	4.3		WA	3.7
6	WA	21.0		REP	10.9
7	REP	8.9		REP	10.7
8	REP	8.7		WA	3.2
9	HAW	4.4		REP	8.7
10	REP	8.5		REP	8.0
11	WA	4.1		REP	8.5
12	WA	5.5		REP	10.5
13	REP	8.8		WA	5.3
14	WA	6.7		REP	7.8
15	REP	9.6			
16	REP	9.9			
17	REP	11.1			
18	WA	4.4			
19	WA	3.7			
20	REP	10.3			
21	WA	5.8			
22	WA	3.0			
23	WA	3.5			
24	REP	10.5			
25	WA	5.8			
26	WA	3.8			
27	WA	3.6			
28	REP	12.0			
29	WA	3.6			
30	WA	3.6			

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: C-mp-5		Plot ID: 043		Waypoint #: 900	
Species	DBH	Species	DBH	Species	DBH
1	WA	3.8			
2	WA	3.5			
3	WA	3.7			
4	REP	13.6			
5	MS	8.2			
6	REP	11.2			
7	WA	18.4			
8	REP	13.7			
9	WA	4.0			
10	REP	12.4			
11	MS	8.5			
12	REP	9.2			
13	BC	3.0			
14	REP	13.0			
15	BC	4.6			
16	REP	12.7			
17	REP	11.1			
18	REP	11.0			
19	REP	8.6			
20	REP	11.3			
21	REP	9.4			
22	REP	9.0			
23	MS	6.3			
24					
25					
26					
27					
28					
29					
30					

Notes: STATE MISSING & REPLACED



Colgate University Forest Carbon Data Sheet Date: 4/10/18

Parcel: Campus		Plot ID: 047		Waypoint #: 808	
Species	DBH	Species	DBH	Species	DBH
SM	19.2				
SM	3.4				
SM	2.5				
SM	8.9				
SM	9.6				
SM	12.0				
SM	14.4				
SP	8.2				
WVA	15.6				
SM	4.4				
SM	9.6				
SM	8.7				
SM	7.8				
SM	6.5				
SM	16.7				
SM	8.8				
SM	5.7				
WVA	17.0				
SM	7.5				
SM	3.4				
SM	5.4				
SM	4.6				
SM	8.4				
SM	5.6				
SM	7.4				
SM	11.0				
WVA	2.0				
SM	6.5				
SM	4.2				
SM	11.8				

Colgate University Forest Carbon Data Sheet Date: 4/10/18

Parcel: Campus		Plot ID: 048		Waypoint #: 708	
Species	DBH	Species	DBH	Species	DBH
SM	11.5				
SM	14.5				
SM	9.2				
SM	12.1				
EH	3.5				
EH	12.2				
EH	18.8				
EH	2.4				
EH	5.6				
SM	8.6				
SM	4.3				
SM	9.0				
WVA	12.8				
SM	4.6				
SM	5.2				
SM	14.2				
SM	11.2				
SM	13.2				
EH	6.7				
EH	6.0				
SM	4.6				
EH	6.1				
EH	7.2				
EH	7.6				
SM	15.8				
EH	8.1				
EH	19.2				

Colgate University Forest Carbon Data Sheet Date: 4/10/18

Parcel: Campus		Plot ID: 046		Waypoint #: 705	
Species	DBH	Species	DBH	Species	DBH
SM	8.3				
SM	9.5				
SP	9.2				
SM	15.5				
SM	18.2				
SM	18.2				
SM	8.6				
SM	17.0				
SM	15.2				
SM	11.1				
SM	6.2				
SM	18.2				
BC	11.9				
BC	14.6				
SM	5.2				
SCD	7.8				
SCD	13.6				

Colgate University Forest Carbon Data Sheet Date: 4/10/18

Parcel: Campus		Plot ID: 047		Waypoint #: 908	
Species	DBH	Species	DBH	Species	DBH
SM	7.8				
SM	5.8				
SM	15.5				
SM	8.1				
SM	6.5				
WVA	22.0				
SM	7.8				
WVA	7.8				
SM	3.2				
SM	5.8				
SM	5.8				
SM	11.2				
SM	7.8				
SM	18.2				
WVA	9.2				
SM	9.4				
SM	9.2				
SM	6.6				
SM	13.6				
SM	3.5				
OST	7.0				
SM	8.2				
SM	2.8				
SM	8.7				
BC	23.8				
OST	5.2				

Colgate University Forest Carbon Data Sheet Date: 4/10/18

Parcel: Campus		Plot ID: 048		Waypoint #: 912	
Species	DBH	Species	DBH	Species	DBH
OST	5.1	SM	7.9		
OST	4.7	SM	5.5		
SM	5.4	SM	10.8		
SM	10.8				
SM	10.6				
SM	4.1				
OST	5.8				
OST	3.8				
WVA	6.6				
SM	3.6				
SM	3.1				
SM	9.1				
SM	8.0				
SM	3.4				
SM	8.9				
WVA	3.5				
WVA	3.2				
WVA	3.6				
WVA	3.3				
WVA	5.2				
SM	10.5				
SM	9.2				
SM	3.7				
BC	13.0				
OST	8.9				
SM	18.0				
BC	8.5				
SM	3.8				
SM	7.0				
SM	10.2				

Colgate University Forest Carbon Data Sheet Date: 4/10/18

Parcel: Campus		Plot ID: 049		Waypoint #: 912	
Species	DBH	Species	DBH	Species	DBH
SM	11.2				
SEP	9.2				
SEP	18.4				
SEP	14.6				
SEP	13.6				
SM	3.6				
SM	6.9				
SEP	11.8				
OST	4.5				
EH	4.7				
SEP	10.1				
SEP	10.8				
SEP	18.5				
SEP	10.9				
SM	4.0				
SEP	10.8				
SEP	10.3				
BC	3.6				
SM	3.2				
SEP	6.1				
SEP	11.5				
SM	6.4				
SM	8.4				
WVA	8.1				
SM	5.5				
SM	4.1				
SM	22.7				
SM	11.7				



Colgate University Forest Carbon Data Sheet Date: 8/10/18

Parcel: Campus 3 Plot ID: 050 Waypoint # 916

Species	DBH	Species	DBH
NS	6.9		
SCP	9.4		
REP	11.5		
NS	9.7		
REP	15.7		
REP	11.0		
REP	10.2		
SCP	8.9		
NS	12.0		
NS	11.7		
NS	8.6		
REP	11.0		
WA	9.0		
REP	11.8		
REP	9.7		
NS	6.5		
NS	9.5		
NS	8.7		
WA	7.1		
REP	10.8		
NS	8.8		
REP	10.9		
REP	11.7		
NS	9.5		

Notes: Stake missing, replaced

Colgate University Forest Carbon Data Sheet Date: 8/10/18

Parcel: Campus 3 Plot ID: 051 Waypoint # 917

Species	DBH	Species	DBH
SM	11.1		
SM	9.8		
SM	10.8		
SM	4.9		
OST	12.5		
SM	7.5		
SM	10.4		
SM	8.2		
SM	8.7		
SM	4.0		
SM	7.2		
SM	3.6		
SM	15.1		
SM	4.8		
SM	10.0		
SM	5.4		
SM	12.4		
SM	11.7		
SM	5.6		
SM	7.9		
SM	5.4		

Notes:

Colgate University Forest Carbon Data Sheet Date: 8/10/18

Parcel: Campus 3 Plot ID: 052 Waypoint # 917

Species	DBH	Species	DBH
BC	18.0		
AP	12.0		
BC	16.7		
AP	15.2		
WA	4.5		
AP	7.2		
BC	11.1		
AP	16.0		
AP	10.9		
WA	14.9		

Notes:

Colgate University Forest Carbon Data Sheet Date: 8/10/18

Parcel: Campus 3 Plot ID: 053 Waypoint # 918

Species	DBH	Species	DBH
WA	14.8		
SM	15.2		
SM	8.9		
SM	3.5		
SM	4.8		
SM	9.7		
SM	6.7		
SM	4.7		
SM	7.0		
SM	21.0		
SM	5.1		
SM	6.2		
SM	3.7		
SM	5.7		
SM	6.0		
SM	10.0		
SM	4.9		
SM	4.0		

Notes: Stake missing, replaced

Colgate University Forest Carbon Data Sheet Date: 8/10/18

Parcel: Campus 3 Plot ID: 054 Waypoint # 919

Species	DBH	Species	DBH
WA	2.4		
REP	18.5		
REP	15.7		
REP	11.2		
REP	16.4		
REP	14.5		
SM	7.7		
BC	8.5		
SM	10.9		
WA	10.5		
REP	16.4		
REP	18.0		
REP	11.6		
REP	19.3		
BC	8.5		
NS	13.0		
REP	9.7		
REP	12.2		
BC	11.1		
REP	12.2		
REP	12.8		
REP	11.5		
WA	5.6		
REP	11.8		
REP	9.7		
REP	12.2		
WA	5.5		
WA	6.7		
WA	5.5		

Notes:

Colgate University Forest Carbon Data Sheet Date: 8/10/18

Parcel: Campus 3 Plot ID: 055 Waypoint # 918

Species	DBH	Species	DBH
BC	9.6		
REP	11.8		
BC	14.7		
REP	4.5		
REP	11.8		
REP	12.9		
REP	10.7		
BC	5.0		
REP	11.4		
REP	18.5		
REP	12.9		
BC	12.8		
REP	13.0		
REP	11.7		
BT	3.1		
BC	13.4		
WA	4.5		
NS	4.8		
BT	3.4		
REP	10.0		
BC	6.7		
BC	4.3		
WA	4.0		
BC	6.5		
BC	4.3		
WA	4.0		
BC	7.0		
BC	11.8		

Notes: Stake missing, replaced





Colgate University Forest Carbon Data Sheet Date: 4/24/16

Parcel#	Campus		Plot ID: CBY	Waypoint #	CE2	
	Species	DBH			Species	DBH
1	WA	5.7		61		
2	WA	3.5	WA	6.2		
3	WA	13.7		63		
4	WA	8.1		64		
5	WA	3.4		65		
6	WA	13.2		66		
7	WA	3.2		67		
8	WA	13.6		68		
9	WA	4.2		69		
10	WA	4.8		70		
11	WA	7.7		71		
12	WA	3.0		72		
13	WA	3.5		73		
14	WA	3.5		74		
15	WA	5.3		75		
16	WA	4.0		76		
17	WA	5.4		77		
18	WA	3.5		78		
19	WA	6.1		79		
20	WA	4.1		80		
21	WA	4.4		81		
22	WA	8.5		82		
23	WA	12.0		83		
24	WA	12.4		84		
25	WA	12.4		85		
26	WA	6.3		86		
27	WA	4.7		87		
28	WA	8.0		88		
29	WA	3.5		89		
30	WA	9.8		90		

Notes: 37% missing replacement

Colgate University Forest Carbon Data Sheet Date: 4/24/16

Parcel#	Campus		Plot ID: CBY	Waypoint #	CE2		
	Species	DBH			Species	DBH	
1	WA	4.9	BC	10.6	61	WA	3.9
2	WA	4.9	WA	5.3	62	WA	4.8
3	WA	4.1	WA	4.1	63	WA	4.5
4	WA	3.2	WA	4.9	64	WA	6.7
5	WA	3.5	WA	3.7	65	WA	3.1
6	WA	3.2	WA	4.9	66	WA	5.3
7	WA	4.8	WA	4.8	67	WA	3.1
8	WA	4.0	WA	4.8	68	WA	3.7
9	WA	3.2	WA	3.4	69	WA	3.8
10	WA	8.9	WA	3.9	70	WA	3.8
11	WA	4.1	WA	3.9	71	WA	3.8
12	WA	4.8	WA	3.5	72	WA	3.8
13	WA	6.6	WA	4.4	73	WA	4.6
14	WA	4.6	WA	3.3	74	WA	4.6
15	WA	3.8	WA	3.0	75	WA	3.1
16	WA	8.9	WA	7.6	76	WA	6.3
17	WA	5.4	WA	3.7	77	WA	8.3
18	WA	4.0	WA	5.1	78	WA	5.5
19	WA	4.8	WA	3.2	79	WA	3.4
20	WA	3.7	WA	3.3	80	WA	3.6
21	WA	4.5	BC	4.7	81	WA	5.6
22	WA	4.1	WA	6.3	82	WA	6.2
23	WA	4.8	WA	5.0	83	WA	7.2
24	WA	3.3	WA	3.9	84	WA	9.4
25	WA	4.0	WA	3.7	85	WA	9.6
26	WA	3.5	WA	3.6	86	WA	5.2
27	WA	4.0	WA	3.2	87	WA	12.0
28	WA	5.1	WA	5.7	88	WA	7.1
29	WA	3.4	WA	4.7	89	WA	3.1
30	WA	5.9	WA	4.0	90	WA	3.5

Notes: expect mortality in 2025

Colgate University Forest Carbon Data Sheet Date: 4/24/16

Parcel#	Campus		Plot ID: CBY	Waypoint #	CE2		
	Species	DBH			Species	DBH	
1	WA	8.4	WA	5.1	61		
2	WA	5.2	WA	9.9	62		
3	WA	7.6	WA	4.4	63		
4	WA	7.5	WA	9.4	64		
5	WA	6.7	WA	3.7	65		
6	WA	8.3	WA	11.5	66		
7	WA	4.2	WA	4.4	67		
8	WA	9.8			68		
9	WA	3.1			69		
10	WA	6.1			70		
11	WA	6.1			71		
12	WA	15.0			72		
13	WA	8.2			73		
14	WA	7.8			74		
15	WA	2.1			75		
16	WA	6.3			76		
17	WA	8.3			77		
18	WA	5.5			78		
19	WA	3.4			79		
20	WA	3.6			80		
21	WA	5.6			81		
22	WA	6.2			82		
23	WA	7.2			83		
24	WA	9.4			84		
25	WA	9.6			85		
26	WA	5.2			86		
27	WA	12.0			87		
28	WA	7.1			88		
29	WA	3.1			89		
30	WA	3.5			90		

Notes: 37% missing replacement

Colgate University Forest Carbon Data Sheet Date: 4/27/16

Parcel#	Campus		Plot ID: CBY	Waypoint #	CE1		
	Species	DBH			Species	DBH	
1	SM	6.1	WA	7.1	61		
2	WA	4.9	SM	7.8	62		
3	WA	6.2	SM	8.5	63		
4	WA	12.7			64		
5	WA	12.2			65		
6	SM	2.9			66		
7	WA	7.2			67		
8	WA	9.8			68		
9	SM	2.4			69		
10	WA	13.8			70		
11	WA	4.0			71		
12	WA	10.2			72		
13	WA	11.8			73		
14	WA	11.8			74		
15	WA	13.1			75		
16	WA	8.4			76		
17	SM	11.6			77		
18	SM	4.8			78		
19	SM	8.5			79		
20	SM	2.5			80		
21	SM	3.7			81		
22	BTA	15.0			82		
23	BTA	12.1			83		
24	SM	12.2			84		
25	SM	3.8			85		
26	SM	7.5			86		
27	SM	8.5			87		
28	SM	4.6			88		
29	SM	5.5			89		
30	WA	12.8			90		

Notes: 37% missing replacement BTA - Bigleaf aspen

Colgate University Forest Carbon Data Sheet Date: 4/27/16

Parcel#	Campus		Plot ID: CBY	Waypoint #	CE2		
	Species	DBH			Species	DBH	
1	WA	5.8	SM	7.8	61		
2	WA	12.1	SM	6.1	62		
3	SM	5.0	NS	12.2	63		
4	NS	14.5	NS	10.7	64		
5	SM	2.0	NS	9.9	65		
6	SM	2.5	SM	5.8	66		
7	SM	4.8	WA	6.1	67		
8	NS	13.8	BC	9.0	68		
9	SM	4.0	WA	4.0	69		
10	WA	7.1			70		
11	SM	5.3			71		
12	WA	7.3			72		
13	WA	7.2			73		
14	SM	5.3			74		
15	NS	12.7			75		
16	WA	7.2			76		
17	WA	6.7			77		
18	WA	5.3			78		
19	SM	4.8			79		
20	WA	12.1			80		
21	NS	9.7			81		
22	SM	8.2			82		
23	NS	4.5			83		
24	WA	9.2			84		
25	SM	5.7			85		
26	SM	6.9			86		
27	NS	9.5			87		
28	SM	7.3			88		
29	NS	12.7			89		
30	SM	11.0			90		

Notes: 37% missing replacement

Colgate University Forest Carbon Data Sheet Date: 4/27/16

Parcel#	Campus		Plot ID: CBY	Waypoint #	PVC		
	Species	DBH			Species	DBH	
1					61		
2					62		
3					63		
4					64		
5					65		
6					66		
7					67		
8					68		
9					69		
10					70		
11					71		
12					72		
13					73		
14					74		
15					75		
16					76		
17					77		
18					78		
19					79		
20					80		
21					81		
22					82		
23					83		
24					84		
25					85		
26					86		
27					87		
28					88		
29					89		
30					90		

Notes: black locust planting on 8/27/16



Colgate University Forest Carbon Data Sheet Date: 4/27/18

Parcel: Campus Plot ID: 090 Waypoint #: CS2

Species	DBH	Species	DBH	Species	DBH
SM	16.0				
WA	7.0				
RM	3.7				
SM	9.7				
WA	8.2				
RM	9.7				
RM	15.4				
RM	9.8				
AP	8.7				
WA	4.7				
RM	16.3				
SVB	3.7				
SVB	3.7				
SVB	3.7				
SM	4.1				
WA	10.8				
WA	10.8				
WA	3.2				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/27/18

Parcel: Campus Plot ID: 091 Waypoint #: CE4

Species	DBH	Species	DBH	Species	DBH
RM	12.3				
BC	7.9				
RM	3.3				
SM	9.0				
SM	5.4				
REP	12.7				
SM	2.6				
SM	9.2				
SM	6.3				
SM	13.2				
SM	7.5				
SM	2.6				
SM	6.1				
SM	4.0				
SM	3.5				
SM	4.7				
SM	4.2				
SM	12.0				
SM	4.0				
SM	11.5				
SM	5.1				
SM	2.2				
SM	18.5				
SM	8.2				
SM	8.2				
SM	18.5				
SM	8.2				
SM	2.1				
SM	6.7				
SM	4.5				
SM	7.7				
WA	7.8				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/27/18

Parcel: Campus Plot ID: 092 Waypoint #: CE5

Species	DBH	Species	DBH	Species	DBH
EMP	17.4	EMP	10.8		
BC	5.0				
RM	3.1				
RM	5.8				
SM	11.4				
SM	12.5				
SM	3.5				
BC	16.6				
BC	16.9				
WA	2.1				
WA	8.1				
RM	6.3				
EMP	4.4				
EMP	9.0				
EMP	6.5				
SM	2.5				
EMP	5.0				
EMP	7.2				
RM	7.5				
BC	9.5				
RM	7.2				
BC	8.3				
RM	5.0				
RM	5.0				
RM	5.1				
RM	4.7				
EMP	12.0				
EMP	6.0				
EMP	17.6				
EMP	6.0				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/27/18

Parcel: Campus Plot ID: 093 Waypoint #: CE6

Species	DBH	Species	DBH	Species	DBH
REP	7.3				
REP	10.5				
REP	9.5				
SCP	12.0				
SCP	8.8				
SCP	10.3				
SCP	9.2				
SCP	5.7				
SCP	4.2				
SCP	5.8				
SCP	6.2				
RM	4.5				
SCP	8.9				
SCP	5.8				
SCP	8.6				
SCP	7.7				
AP	4.2				
SCP	8.6				
SCP	12.4				
SCP	12.4				
SM	15.0				
SM	8.2				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/27/18

Parcel: Campus Plot ID: 094 Waypoint #: CE7

Species	DBH	Species	DBH	Species	DBH
AP	4.1				
AP	4.2				
GA	13.3				
GA	18.5				
AP	3.2				
AP	4.2				
WA	14.0				
GA	11.3				
GA	9.6				
AP	10.1				
AP	4.5				
WA	8.0				
WA	8.0				
AP	14.0				
GA	13.3				
GA	11.6				
WA	6.8				
GA	6.9				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/27/18

Parcel: Campus Plot ID: 095 Waypoint #: CE11

Species	DBH	Species	DBH	Species	DBH
WA	9.3				
BH	8.9				
OST	5.2				
OST	5.5				
OST	2.2				
BH	8.7				
SM	5.9				
BH	14.0				
BH	4.5				
SM	11.2				
SM	8.7				
SM	5.0				
WA	12.0				
SM	4.1				
BH	7.8				
BH	5.6				
WA	14.1				

Notes:



Colgate University Forest Carbon Data Sheet Date: 4/2/16

Parcel: C-96		Plot ID: 096		Waypoint #: C51	
Species	DBH	Species	DBH	Species	DBH
1	SM	15.0	31		61
2	SM	10.6	32		62
3	SM	14.4	33		63
4	WA	22.1	34		64
5	SM	14.5	35		65
6	SM	4.0	36		66
7	SM	8.8	37		67
8	SM	3.5	38		68
9	SM	11.0	39		69
10	SM	19.1	40		70
11	SM	6.5	41		71
12	SM	8.6	42		72
13	SM	8.6	43		73
14	SM	6.2	44		74
15	WA	19.1	45		75
16	WA	16.1	46		76
17	SM	4.2	47		77
18			48		78
19			49		79
20			50		80
21			51		81
22			52		82
23			53		83
24			54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes: *State missing / replaced*

Colgate University Forest Carbon Data Sheet Date: 4/2/16

Parcel: C-97		Plot ID: 097		Waypoint #: C55	
Species	DBH	Species	DBH	Species	DBH
1	SM	11.0	31		61
2	SM	18.5	32		62
3	WA	12.1	33		63
4	SM	6.7	34		64
5	SM	14.1	35		65
6	SM	8.4	36		66
7	SM	13.8	37		67
8	SM	9.3	38		68
9	SM	4.5	39		69
10	SM	10.9	40		70
11	SM	6.5	41		71
12	SM	5.0	42		72
13	WA	12.6	43		73
14	SM	3.8	44		74
15	SM	6.8	45		75
16	SM	9.1	46		76
17	SM	7.1	47		77
18	SM	14.0	48		78
19	WA	8.3	49		79
20	SM	7.8	50		80
21	SM	5.3	51		81
22	WA	12.8	52		82
23	SM	3.0	53		83
24	WA	9.4	54		84
25	SM	12.2	55		85
26	WA	11.2	56		86
27	SM	10.5	57		87
28	SM	3.7	58		88
29	SM	14.0	59		89
30			60		90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/2/16

Parcel: C-98		Plot ID: 098		Waypoint #: C58	
Species	DBH	Species	DBH	Species	DBH
1	WA	7.2	31		61
2	WA	8.1	32		62
3	WA	5.6	33		63
4	WA	9.1	34		64
5	WA	8.4	35		65
6	WA	9.0	36		66
7	WA	12.2	37		67
8	WA	8.5	38		68
9	WA	12.2	39		69
10	WA	11.9	40		70
11	WA	4.5	41		71
12	WA	8.7	42		72
13	WA	10.3	43		73
14	WA	3.5	44		74
15	WA	3.7	45		75
16	WA	8.9	46		76
17	WA	3.4	47		77
18	WA	4.0	48		78
19	WA	8.4	49		79
20	WA	7.7	50		80
21	WA	4.2	51		81
22	WA	13.8	52		82
23	SM	7.2	53		83
24	SM	9.6	54		84
25	SM	3.8	55		85
26	WA	10.8	56		86
27	WA	10.9	57		87
28	WA	11.8	58		88
29	WA	11.2	59		89
30			60		90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/2/16

Parcel: C-99		Plot ID: 099		Waypoint #: C56	
Species	DBH	Species	DBH	Species	DBH
1	SM	4.2	31		61
2	WA	12.5	32		62
3	WA	6.0	33		63
4	WA	8.4	34		64
5	WA	4.7	35		65
6	WA	6.0	36		66
7	SM	7.7	37		67
8	WA	4.2	38		68
9	SM	6.6	39		69
10	SM	5.4	40		70
11	WA	7.3	41		71
12	WA	4.7	42		72
13	SM	14.9	43		73
14	SM	16.1	44		74
15	SM	5.3	45		75
16	SM	8.0	46		76
17	WA	9.7	47		77
18	WA	4.5	48		78
19	SM	8.2	49		79
20	WA	9.2	50		80
21	WA	5.4	51		81
22	WA	9.8	52		82
23	WA	6.1	53		83
24	SM	5.1	54		84
25	WA	6.0	55		85
26	WA	5.2	56		86
27	SM	6.5	57		87
28	WA	4.8	58		88
29	WA	5.7	59		89
30			60		90

Notes: *State missing / replaced*

Colgate University Forest Carbon Data Sheet Date: 4/2/16

Parcel: C-100		Plot ID: 100		Waypoint #: C57	
Species	DBH	Species	DBH	Species	DBH
1	WA	9.5	31		61
2			32		62
3	WA	9.1	33		63
4			34		64
5			35		65
6			36		66
7			37		67
8			38		68
9			39		69
10			40		70
11			41		71
12			42		72
13			43		73
14			44		74
15			45		75
16			46		76
17			47		77
18			48		78
19			49		79
20			50		80
21			51		81
22			52		82
23			53		83
24			54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/2/16

Parcel: C-101		Plot ID: 101		Waypoint #: C59	
Species	DBH	Species	DBH	Species	DBH
1	WA	4.9	31		61
2	WA	7.9	32		62
3	WA	8.1	33		63
4	WA	5.2	34		64
5	WA	6.6	35		65
6	WA	4.2	36		66
7			37		67
8			38		68
9			39		69
10			40		70
11			41		71
12			42		72
13			43		73
14			44		74
15			45		75
16			46		76
17			47		77
18			48		78
19			49		79
20			50		80
21			51		81
22			52		82
23			53		83
24			54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes:



Colgate University Forest Carbon Data Sheet Date: 4/2/18

Parcel: Campus Plot ID: 102 Waypoint #: 923

Species	DBH	Species	DBH	Species	DBH
1	RM 18.8	31		61	
2	WA 4.2	32		62	
3	WA 10.6	33		63	
4	QA 11.1	34		64	
5	QA 6.9	35		65	
6	QA 13.7	36		66	
7	QA 9.2	37		67	
8	QA 8.9	38		68	
9	WA 8.1	39		69	
10	WA 5.2	40		70	
11	WA 5.2	41		71	
12	WA 10.0	42		72	
13	WA 7.8	43		73	
14	CM 6.8	44		74	
15	SM 16.7	45		75	
16	WA 6.3	46		76	
17	QA 9.2	47		77	
18	QA 10.6	48		78	
19	RM 16.5	49		79	
20	REP 12.1	50		80	
21	QA 10.4	51		81	
22	QA 0.6	52		82	
23	RM 5.1	53		83	
24	WA 3.8	54		84	
25		55		85	
26		56		86	
27		57		87	
28		58		88	
29		59		89	
30		60		90	

Notes: *State not found, replaced*

Colgate University Forest Carbon Data Sheet Date: 4/2/18

Parcel: Campus Plot ID: 132 Waypoint #: 944

Species	DBH	Species	DBH	Species	DBH
1	REP 11.1	31	WA 3.9	61	
2	REP 12.7	32	WA 3.5	62	
3	REP 12.5	33	REP 10.6	63	
4	REP 10.3	34	WA 5.3	64	
5	REP 9.9	35	REP 10.3	65	
6	REP 13.3	36	REP 10.7	66	
7	REP 9.2	37	WA 3.5	67	
8	REP 11.2	38	REP 10.4	68	
9	REP 11.3	39	WA 3.1	69	
10	REP 14.0	40	REP 10.5	70	
11	REP 11.1	41	REP 12.6	71	
12	MS 11.6	42	WA 3.8	72	
13	WA 4.5	43	WA 4.5	73	
14	WA 4.8	44	WA 3.0	74	
15	WA 5.0	45	REP 10.7	75	
16	WA 5.0	46	REP 12.9	76	
17	WA 3.7	47	WA 3.0	77	
18	WA 4.9	48	REP 15.0	78	
19	WA 5.6	49	WA 8.8	79	
20	WA 4.2	50	WA 4.4	80	
21	REP 10.3	51	REP 10.5	81	
22	REP 10.7	52	REP 11.4	82	
23	REP 11.7	53		83	
24	REP 12.5	54		84	
25	REP 8.6	55		85	
26	REP 10.2	56		86	
27	WA 4.1	57		87	
28	WA 4.7	58		88	
29	WA 4.7	59		89	
30	WA 5.0	60		90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/2/18

Parcel: Campus Plot ID: 126 Waypoint #: 919

Species	DBH	Species	DBH	Species	DBH
1	WA 5.1	31		61	
2	SCP 14.2	32		62	
3	BC 13.2	33		63	
4	BC 12.4	34		64	
5	BC 12.2	35		65	
6	WA 5.5	36		66	
7	SCP 10.3	37		67	
8	WA 5.4	38		68	
9	SCP 12.0	39		69	
10	SCP 11.2	40		70	
11	BC 7.8	41		71	
12	BC 5.4	42		72	
13	BC 10.5	43		73	
14	SM 14.7	44		74	
15	SM 4.1	45		75	
16		46		76	
17		47		77	
18		48		78	
19		49		79	
20		50		80	
21		51		81	
22		52		82	
23		53		83	
24		54		84	
25		55		85	
26		56		86	
27		57		87	
28		58		88	
29		59		89	
30		60		90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/2/18

Parcel: Campus Plot ID: 130 Waypoint #: 921

Species	DBH	Species	DBH	Species	DBH
1	HAW 5.9	31		61	
2	SM 14.0	32		62	
3	BC 10.8	33		63	
4	BC 10.7	34		64	
5	SM 2.1	35		65	
6	BC 13.7	36		66	
7	RM 15.5	37		67	
8	RM 10.2	38		68	
9	WA 16.4	39		69	
10	BC 25.2	40		70	
11	BC 27.5	41		71	
12		42		72	
13		43		73	
14		44		74	
15		45		75	
16		46		76	
17		47		77	
18		48		78	
19		49		79	
20		50		80	
21		51		81	
22		52		82	
23		53		83	
24		54		84	
25		55		85	
26		56		86	
27		57		87	
28		58		88	
29		59		89	
30		60		90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/2/18

Parcel: Campus Plot ID: none Waypoint #: 958

Species	DBH	Species	DBH	Species	DBH
1		31		61	
2		32		62	
3		33		63	
4		34		64	
5		35		65	
6		36		66	
7		37		67	
8		38		68	
9		39		69	
10		40		70	
11		41		71	
12		42		72	
13		43		73	
14		44		74	
15		45		75	
16		46		76	
17		47		77	
18		48		78	
19		49		79	
20		50		80	
21		51		81	
22		52		82	
23		53		83	
24		54		84	
25		55		85	
26		56		86	
27		57		87	
28		58		88	
29		59		89	
30		60		90	

Notes: *Point lost to development*

Colgate University Forest Carbon Data Sheet Date: 4/2/17

Parcel: Campus Plot ID: 131 Waypoint #: 927

Species	DBH	Species	DBH	Species	DBH
1	EH 12.8	31		61	
2	SM 20.8	32		62	
3	OST 3.7	33		63	
4	SM 9.9	34		64	
5	EH 5.7	35		65	
6	WA 19.1	36		66	
7	AB 4.2	37		67	
8	BC 15.2	38		68	
9	SM 20.5	39		69	
10	AB 5.9	40		70	
11	SM 18.5	41		71	
12	AB 6.5	42		72	
13	EH 7.2	43		73	
14	WA 10.8	44		74	
15		45		75	
16		46		76	
17		47		77	
18		48		78	
19		49		79	
20		50		80	
21		51		81	
22		52		82	
23		53		83	
24		54		84	
25		55		85	
26		56		86	
27		57		87	
28		58		88	
29		59		89	
30		60		90	

Notes: *State missing, replaced, new tree species*



Colgate University Forest Carbon Data Sheet Date: 4/30/18

Parcel: Campus Plot ID: 126 Waypoint #: 1167

Species	DBH	Species	DBH
1	SM 22.3	61	
2	SC 9.3	62	
3	WA 8.2	63	
4	AP 5.2	64	
5	SCP 12.1	65	
6	SP 5.6	66	
7	SC 8.8	67	
8	AP 9.2	68	
9	AP 8.5	69	
10	SC 24.0	70	
11	AT 10.22	71	
12	HAN 7.2	72	
13	AP 11.8	73	
14	AP 5.2	74	
15	AP 6.6	75	
16	AP 6.2	76	
17	SCP 13.0	77	
18	WA 5.6	78	
19	SC 11.8	79	
20	SCP 15.7	80	
21		81	
22		82	
23		83	
24		84	
25		85	
26		86	
27		87	
28		88	
29		89	
30		90	

Notes: *stake - very splashed, new plot clearly overlaps old!*

Colgate University Forest Carbon Data Sheet Date: 4/30/18

Parcel: Campus Plot ID: 127 Waypoint #: 910

Species	DBH	Species	DBH
1	WA 3.4	61	
2	WA 5.0	62	
3	SCP 11.8	63	
4	SCP 14.1	64	
5	SCP 14.9	65	
6	SCP 12.4	66	
7	SCP 12.5	67	
8	WA 9.7	68	
9	SCP 11.0	69	
10	WA 3.0	70	
11	SCP 12.4	71	
12	SCP 12.5	72	
13	SCP 15.6	73	
14	SCP 11.1	74	
15	AT 4.0	75	
16	SCP 10.2	76	
17	SCP 11.0	77	
18	WA 3.9	78	
19		79	
20		80	
21		81	
22		82	
23		83	
24		84	
25		85	
26		86	
27		87	
28		88	
29		89	
30		90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/30/18

Parcel: Campus Plot ID: 125 Waypoint #: 893

Species	DBH	Species	DBH
1	KPA 9.0	61	
2	WA 3.7	62	
3	WA 3.5	63	
4	WA 4.1	64	
5	WA 4.0	65	
6		66	
7		67	
8		68	
9		69	
10		70	
11		71	
12		72	
13		73	
14		74	
15		75	
16		76	
17		77	
18		78	
19		79	
20		80	
21		81	
22		82	
23		83	
24		84	
25		85	
26		86	
27		87	
28		88	
29		89	
30		90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 5/6/18

Parcel: Campus Plot ID: 168 Waypoint #: 915

Species	DBH	Species	DBH
1	SM 5.7	61	
2	Ost 7.0	62	
3	Ost 6.5	63	
4	SM 18.6	64	
5	Ost 4.6	65	
6	Ost 4.8	66	
7	BA 7.4	67	
8	WA 15.7	68	
9	SM 17.2	69	
10	SM 13.5	70	
11	Ost 5.6	71	
12	SM 16.8	72	
13	SM 3.4	73	
14	Ost 6.7	74	
15	Ost 4.8	75	
16	SM 4.9	76	
17	SM 6.9	77	
18	Ost 7.5	78	
19	Ost 6.2	79	
20	Ost 4.7	80	
21	Ost 5.7	81	
22	Ost 4.3	82	
23	SM 5.4	83	
24	SM 17.8	84	
25	SM 12.7	85	
26		86	
27		87	
28		88	
29		89	
30		90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 5/6/18

Parcel: Campus Plot ID: 169 Waypoint #: 935

Species	DBH	Species	DBH
1	SM 8.5	61	
2	SM 5.2	62	
3	SM 3.5	63	
4	SM 11.2	64	
5	SVB 5.6	65	
6	SM 16.4	66	
7	WA 6.0	67	
8	SM 7.8	68	
9	WA 18.8	69	
10	SM 5.8	70	
11	WA 9.0	71	
12	SM 3.2	72	
13	SM 10.3	73	
14	WA 5.4	74	
15	SM 4.2	75	
16	SM 5.7	76	
17	SM 4.8	77	
18	SM 4.8	78	
19	SM 3.6	79	
20	WA 10.1	80	
21	SM 3.7	81	
22	WA 7.3	82	
23	SM 5.8	83	
24	WA 11.9	84	
25	SM 5.5	85	
26		86	
27		87	
28		88	
29		89	
30		90	

Notes: *Ash Mortality*

Colgate University Forest Carbon Data Sheet Date: 4/20/18

Parcel: H5N Plot ID: 027 Waypoint #: 020

Species	DBH	Species	DBH
1	SM 17.8	61	
2	SM 6.3	62	
3	AB 5.2	63	
4	SM 12.0	64	
5	AB 3.2	65	
6	AB 3.8	66	
7	AB 3.8	67	
8	AB 8.7	68	
9	AB 2.8	69	
10	AB 5.0	70	
11	WA 23.5	71	
12	AB 4.3	72	
13	AB 8.0	73	
14	STH 5.5	74	
15	SM 15.3	75	
16	AB 3.9	76	
17	SM 8.9	77	
18	AB 4.1	78	
19	AB 6.0	79	
20	SM 7.3	80	
21	WA 16.0	81	
22		82	
23		83	
24		84	
25		85	
26		86	
27		87	
28		88	
29		89	
30		90	

Notes:



Colgate University Forest Carbon Data Sheet Date: 4/23/18

Parcel: HSN Plot ID: OX# Waypoint #: BBS

Species	DBH	Species	DBH	Species	DBH
1 AB 8.5	31				
2 AH 4.9	32				
3 EH 11.6	33				
4 EH 8.6	34				
5 AB 7.9	35				
6 EH 6.0	36				
7 EH 6.8	37				
8 EH 9.0	38				
9 EH 3.3	39				
10 AB 3.6	40				
11 SM 38.4	41				
12 EH 7.8	42				
13 OST 9.2	43				
14 AB 6.0	44				
15 AB 3.7	45				
16 AB 13.1	46				
17 AB 14.9	47				
18 EH 2.5	48				
19 EH 9.9	49				
20 SM 22.0	50				
21 EH 8.6	51				
22	52				
23	53				
24	54				
25	55				
26	56				
27	57				
28	58				
29	59				
30	60				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/23/18

Parcel: HSN Plot ID: 07B Waypoint #: BBT

Species	DBH	Species	DBH	Species	DBH
1 SM 12.6	31				
2 AB 5.2	32				
3 NA 22.6	33				
4 NA 8.0	34				
5 AB 9.5	35				
6 AB 3.4	36				
7 AB 11.7	37				
8 SM 5.1	38				
9 SM 18.1	39				
10 HT 3.7	40				
11 SM 15.2	41				
12 EH 5.0	42				
13 SM 6.5	43				
14 EH 8.7	44				
15 EH 2.9	45				
16 SM 10.2	46				
17 BC 4.3	47				
18 EH 12.3	48				
19 SM 15.9	49				
20 RM 13.2	50				
21	51				
22	52				
23	53				
24	54				
25	55				
26	56				
27	57				
28	58				
29	59				
30	60				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/23/18

Parcel: HSN Plot ID: 075 Waypoint #: BBT

Species	DBH	Species	DBH	Species	DBH
1 AB 3.6	31				
2 SM 22.8	32				
3 EH 8.6	33				
4 EH 7.8	34				
5 EH 8.6	35				
6 SM 25.2	36				
7 SM 15.2	37				
8 EH 6.7	38				
9 EH 9.7	39				
10 SM 19.1	40				
11 SM 18.3	41				
12 EH 18.1	42				
13 SM 21.0	43				
14 EH 8.7	44				
15 SM 11.0	45				
16 SM 2.5	46				
17 SM 24.0	47				
18 EH 4.1	48				
19 OST 9.7	49				
20	50				
21	51				
22	52				
23	53				
24	54				
25	55				
26	56				
27	57				
28	58				
29	59				
30	60				

Notes: State missing & replaced

Colgate University Forest Carbon Data Sheet Date: 4/23/18

Parcel: HSN Plot ID: OBD Waypoint #: BBY

Species	DBH	Species	DBH	Species	DBH
1 SM 6.7	31				
2 SM 15.4	32				
3 EH 10.6	33				
4 SM 17.1	34				
5 SM 12.4	35				
6 AB 3.1	36				
7 SM 9.1	37				
8 SM 15.8	38				
9 OST 3.7	39				
10 SM 14.3	40				
11 SM 12.1	41				
12 SM 16.5	42				
13 SM 13.9	43				
14 SM 18.5	44				
15 SM 11.0	45				
16 EH 8.9	46				
17 AB 5.1	47				
18 SM 7.6	48				
19	49				
20	50				
21	51				
22	52				
23	53				
24	54				
25	55				
26	56				
27	57				
28	58				
29	59				
30	60				

Notes: State missing & replaced

Colgate University Forest Carbon Data Sheet Date: 4/23/18

Parcel: HSN Plot ID: 100 Waypoint #: B72

Species	DBH	Species	DBH	Species	DBH
1 SCP 9.3	31				
2 SCP 5.3	32				
3 SCP 14.2	33				
4 SM 12.0	34				
5 BC 31.5	35				
6 SM 17.5	36				
7 SM 11.1	37				
8 NS 5.2	38				
9 SCP 13.7	39				
10 NS 13.6	40				
11 NS 11.0	41				
12 NS 18.8	42				
13 NS 14.2	43				
14 SCP 12.4	44				
15 BC 5.6	45				
16 SCP 10.7	46				
17 BX 6.3	47				
18 NS 4.6	48				
19 NS 7.6	49				
20 BX 9.7	50				
21 BX 10.0	51				
22 NS 4.7	52				
23 NS 7.2	53				
24 SCP 8.4	54				
25	55				
26	56				
27	57				
28	58				
29	59				
30	60				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/3/18

Parcel: HSN Plot ID: 134 Waypoint #: B61

Species	DBH	Species	DBH	Species	DBH
1 REP 9.2	31	BC 13.1	61		
2 REP 10.2	32	NA 9.0	62		
3 REP 10.2	33	SM 6.1	63		
4 REP 9.1	34	NA 8.2	64		
5 REP 9.5	35	REP 10.6	65		
6 REP 9.3	36	REP 9.2	66		
7 REP 8.6	37	REP 8.4	67		
8 REP 9.6	38	REP 10.1	68		
9 REP 11.0	39	BC 12.6	69		
10 REP 9.2	40	REP 8.3	70		
11 REP 10.1	41	REP 11.3	71		
12 REP 10.6	42		72		
13 REP 8.0	43		73		
14 REP 10.1	44		74		
15 REP 9.5	45		75		
16 REP 10.3	46		76		
17 REP 10.0	47		77		
18 REP 9.7	48		78		
19 REP 10.7	49		79		
20 REP 8.8	50		80		
21 REP 9.9	51		81		
22 REP 8.0	52		82		
23 REP 8.1	53		83		
24 REP 10.4	54		84		
25 REP 8.2	55		85		
26 REP 9.2	56		86		
27 REP 8.2	57		87		
28 REP 10.2	58		88		
29 REP 8.2	59		89		
30 REP 8.0	60		90		

Notes: state missing & replaced



Colgate University Forest Carbon Data Sheet Date: 4/9/18

Parcel: H5V		Plot ID: 135		Waypoint # 262		
Species	DBH	Species	DBH	Species	DBH	
1	RM	13.5	31	SM	6.9	61
2	SM	5.5	32	SM	3.8	62
3	WA	9.0	33	WA	6.8	63
4	WA	4.0	34	WA	3.4	64
5	SM	4.8	35	SM	8.2	65
6	WA	10.5	36	SM	3.7	66
7	SM	3.6	37	SM	3.7	67
8	WA	3.4	38	SM	8.9	68
9	RM	4.7	39			69
10	WA	7.2	40			70
11	SM	3.3	41			71
12	WA	5.8	42			72
13	SM	4.2	43			73
14	WA	6.8	44			74
15	WA	2.4	45			75
16	WA	3.5	46			76
17	WA	5.5	47			77
18	WA	8.3	48			78
19	WA	7.9	49			79
20	WA	3.7	50			80
21	WA	3.7	51			81
22	WA	7.8	52			82
23	WA	4.1	53			83
24	WA	5.8	54			84
25	WA	7.1	55			85
26	WA	5.8	56			86
27	WA	4.3	57			87
28	SM	4.6	58			88
29	WA	3.6	59			89
30	SM	6.7	60			90

Notes: 266 mortality

Colgate University Forest Carbon Data Sheet Date: 4/3/18

Parcel: H5V		Plot ID: 136		Waypoint # 265		
Species	DBH	Species	DBH	Species	DBH	
1	SM	22.5	31			61
2	SM	19.3	32			62
3	SM	12.6	33			63
4	SM	3.2	34			64
5	OST	2.1	35			65
6	AB	3.1	36			66
7	AB	3.6	37			67
8	AB	3.6	38			68
9	SM	9.8	39			69
10	SM	16.8	40			70
11	SM	18.6	41			71
12	SM	15.6	42			72
13	SM	8.2	43			73
14	SM	15.6	44			74
15	SM	16.0	45			75
16	AB	3.4	46			76
17	SM	16.2	47			77
18	WA	18.2	48			78
19	SM	3.8	49			79
20			50			80
21			51			81
22			52			82
23			53			83
24			54			84
25			55			85
26			56			86
27			57			87
28			58			88
29			59			89
30			60			90

Notes: stake missing - re-set

Colgate University Forest Carbon Data Sheet Date: 4/9/18

Parcel: H5V		Plot ID: 141		Waypoint # 266		
Species	DBH	Species	DBH	Species	DBH	
1	SM	24.4	31			61
2	SM	9.3	32			62
3	RM	22.9	33			63
4	AB	4.6	34			64
5	SM	5.1	35			65
6	AB	11.8	36			66
7	AB	4.7	37			67
8	AB	4.7	38			68
9	AB	5.8	39			69
10	AB	6.0	40			70
11	AB	14.1	41			71
12	SM	3.5	42			72
13	SM	6.2	43			73
14	AB	12.7	44			74
15	AB	4.5	45			75
16	AB	11.2	46			76
17	AB	4.6	47			77
18	AB	11.3	48			78
19	SM	3.2	49			79
20	AB	8.1	50			80
21	SM	16.0	51			81
22			52			82
23			53			83
24			54			84
25			55			85
26			56			86
27			57			87
28			58			88
29			59			89
30			60			90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/3/14

Parcel: H5V		Plot ID: 142		Waypoint # 267		
Species	DBH	Species	DBH	Species	DBH	
1	BC	19.2	31			61
2	SM	10.6	32			62
3	SM	13.8	33			63
4	WA	16.4	34			64
5	SM	7.8	35			65
6	SM	10.9	36			66
7	SM	8.8	37			67
8	SM	15.4	38			68
9	SM	18.1	39			69
10	SM	3.3	40			70
11	OST	7.5	41			71
12	SM	8.0	42			72
13	BC	18.5	43			73
14	AB	5.8	44			74
15	SM	18.0	45			75
16	SM	22.7	46			76
17			47			77
18			48			78
19			49			79
20			50			80
21			51			81
22			52			82
23			53			83
24			54			84
25			55			85
26			56			86
27			57			87
28			58			88
29			59			89
30			60			90

Notes: stake missing - re-plant

Colgate University Forest Carbon Data Sheet Date: 4/3/18

Parcel: H5V		Plot ID: 140		Waypoint # 268		
Species	DBH	Species	DBH	Species	DBH	
1	SM	17.4	31			61
2	SM	6.6	32			62
3	SM	5.8	33			63
4	SM	12.8	34			64
5	AB	14.8	35			65
6	AB	11.5	36			66
7	SM	13.8	37			67
8	SM	15.8	38			68
9	BC	22.0	39			69
10	SM	17.5	40			70
11	SM	12.2	41			71
12	SM	10.2	42			72
13	BC	22.1	43			73
14	SM	9.8	44			74
15			45			75
16			46			76
17			47			77
18			48			78
19			49			79
20			50			80
21			51			81
22			52			82
23			53			83
24			54			84
25			55			85
26			56			86
27			57			87
28			58			88
29			59			89
30			60			90

Notes: stake missing - point reset

Colgate University Forest Carbon Data Sheet Date: 4/3/18

Parcel: H5V		Plot ID: 138		Waypoint # 269		
Species	DBH	Species	DBH	Species	DBH	
1	SM	24.5	31			61
2	SM	27.8	32			62
3	SM	21.3	33			63
4	SM	18.5	34			64
5	SM	22.0	35			65
6	SM	25.6	36			66
7			37			67
8			38			68
9			39			69
10			40			70
11			41			71
12			42			72
13			43			73
14			44			74
15			45			75
16			46			76
17			47			77
18			48			78
19			49			79
20			50			80
21			51			81
22			52			82
23			53			83
24			54			84
25			55			85
26			56			86
27			57			87
28			58			88
29			59			89
30			60			90

Notes: one tree may be original tally



Colgate University Forest Carbon Data Sheet Date: 4/3/18

Parcel: H5N Plot ID: 137 Waypoint # 099

Species	DBH	Species	DBH	Species	DBH
1 SM 18.9	31 RM 3.9	61			
2 SM 8.2	32 RM 6.7	62			
3 SM 8.0	33 WA 7.7	63			
4 SM 2.2	34 RM 8.5	64			
5 SM 7.2	35 RM 8.7	65			
6 SM 7.5	36 RM 5.7	66			
7 RM 9.6	37 WA 3.2	67			
8 SM 5.0	38 SM 3.1	68			
9 SM 5.7	39	69			
10 RM 9.1	40	70			
11 RM 8.9	41	71			
12 RM 12.0	42	72			
13 SM 5.2	43	73			
14 SM 5.2	44	74			
15 SM 3.4	45	75			
16 SM 5.8	46	76			
17 SM 5.2	47	77			
18 SM 4.7	48	78			
19 SM 7.9	49	79			
20 SM 2.7	50	80			
21 SM 4.3	51	81			
22 WA 8.8	52	82			
23 SM 5.8	53	83			
24 RM 8.8	54	84			
25 SM 4.6	55	85			
26 SM 6.8	56	86			
27 SM 5.2	57	87			
28 SM 4.0	58	88			
29 RM 3.2	59	89			
30 SM 5.0	60	90			

Notes: Stake missing + rescal

Colgate University Forest Carbon Data Sheet Date: 4/3/18

Parcel: H5N Plot ID: 145 Waypoint # 092

Species	DBH	Species	DBH	Species	DBH
1 WA 4.1	31 SM 8.3	61			
2 AB 2.6	32 SM 7.9	62			
3 SB 2.2	33 SM 3.4	63			
4 AB 2.5	34 RM 3.3	64			
5 SM 2.6	35 SM 8.5	65			
6 AB 2.2	36 SM 7.2	66			
7 AB 2.2	37 SM 6.3	67			
8 SM 4.9	38 SM 7.9	68			
9 WA 8.0	39 WA 3.9	69			
10 SR 7.6	40 WA 7.1	70			
11 SR 6.4	41 SM 4.2	71			
12 SM 6.6	42 WA 4.6	72			
13 RC 8.4	43 SB 7.8	73			
14 OST 4.3	44 SB 7.4	74			
15 SM 5.2	45 GA 10.0	75			
16 SM 3.5	46	76			
17 SM 3.1	47	77			
18 SM 5.3	48	78			
19 WA 2.5	49	79			
20 SVC 5.7	50	80			
21 RM 8.8	51	81			
22 SM 4.4	52	82			
23 WA 3.5	53	83			
24 SM 4.7	54	84			
25 WA 3.3	55	85			
26 SM 5.6	56	86			
27 RM 5.3	57	87			
28 SM 6.2	58	88			
29 RC 4.0	59	89			
30 SB 4.5	60	90			

Notes: Stake missing + rescaled

Colgate University Forest Carbon Data Sheet Date: 4/3/18

Parcel: H5N Plot ID: 133 Waypoint # 093

Species	DBH	Species	DBH	Species	DBH
1 GA 12.6	31 RC 11.7	61			
2 SM 7.1	32 WA 4.3	62			
3 SM 3.5	33 SM 8.0	63			
4 SM 5.2	34 SM 5.7	64			
5 SM 3.8	35 WA 11.5	65			
6 SM 3.5	36 WA 4.5	66			
7 SM 6.5	37 GA 14.4	67			
8 SM 3.2	38 SM 12.5	68			
9 SM 4.2	39 SM 8.2	69			
10 SM 6.8	40 OST 8.5	70			
11 SM 3.8	41	71			
12 SM 5.8	42	72			
13 SM 11.5	43	73			
14 SM 4.2	44	74			
15 WA 10.0	45	75			
16 WA 6.1	46	76			
17 WA 5.6	47	77			
18 SM 4.1	48	78			
19 SM 5.7	49	79			
20 SM 4.7	50	80			
21 SM 4.2	51	81			
22 SM 5.8	52	82			
23 WA 9.7	53	83			
24 WA 10.7	54	84			
25 SM 6.1	55	85			
26 SM 4.5	56	86			
27 SM 2.4	57	87			
28 SM 5.0	58	88			
29 WA 12.3	59	89			
30 WA 4.4	60	90			

Notes: Stake missing + rescaled

Colgate University Forest Carbon Data Sheet Date: 4/3/18

Parcel: H5N Plot ID: 144 Waypoint # 096

Species	DBH	Species	DBH	Species	DBH
1 RM 7.5	31 SM 5.2	61			
2 SM 12.9	32 SM 3.0	62			
3 SM 12.1	33 RM 9.3	63			
4 SM 5.6	34 SM 6.8	64			
5 RM 10.5	35 RC 9.7	65			
6 SM 5.7	36 RM 7.2	66			
7 SM 11.1	37 RM 4.4	67			
8 SM 6.2	38 SM 5.0	68			
9 RM 3.6	39 SM 4.6	69			
10 RM 3.2	40 SM 4.5	70			
11 WA 16.2	41 RM 9.3	71			
12 OST 5.3	42 SM 4.8	72			
13 RC 7.6	43	73			
14 OST 2.6	44	74			
15 RM 5.1	45	75			
16 RM 8.5	46	76			
17 SM 5.8	47	77			
18 RM 7.8	48	78			
19 SM 6.8	49	79			
20 RM 5.2	50	80			
21 SM 5.5	51	81			
22 SM 5.3	52	82			
23 SM 2.2	53	83			
24 SM 9.3	54	84			
25 SM 6.8	55	85			
26 RM 6.2	56	86			
27 SM 5.0	57	87			
28 RM 5.7	58	88			
29 RM 4.1	59	89			
30 RM 16.0	60	90			

Notes: Stake missing + rescaled

Colgate University Forest Carbon Data Sheet Date: 4/3/18

Parcel: H5N Plot ID: 120 Waypoint # 089

Species	DBH	Species	DBH	Species	DBH
1 SM 10.7	31	61			
2 SM 9.6	32	62			
3 SM 4.2	33	63			
4 SM 4.7	34	64			
5 SM 11.7	35	65			
6 RM 3.8	36	66			
7 SM 11.0	37	67			
8 SM 9.2	38	68			
9 RM 11.8	39	69			
10 WA 8.8	40	70			
11 WA 16.2	41	71			
12 WA 14.5	42	72			
13 WA 7.8	43	73			
14 WA 11.1	44	74			
15 SM 5.2	45	75			
16 RM 17.8	46	76			
17 SM 7.6	47	77			
18 SM 5.6	48	78			
19 SM 4.6	49	79			
20 SM 8.0	50	80			
21 SM 8.5	51	81			
22 SM 8.0	52	82			
23 SM 2.1	53	83			
24 SM 4.2	54	84			
25 SM 14.3	55	85			
26 SM 12.2	56	86			
27 SM 3.5	57	87			
28 SM 10.4	58	88			
29	59	89			
30	60	90			

Notes: Stake missing + rescaled

Colgate University Forest Carbon Data Sheet Date: 4/3/18

Parcel: H5N Plot ID: 122 Waypoint # 085

Species	DBH	Species	DBH	Species	DBH
1 SM 4.4	31 SM 8.3	61			
2 SM 5.6	32 SM 6.2	62			
3 SM 7.2	33 SM 7.2	63			
4 SM 6.7	34 SM 4.7	64			
5 SM 6.6	35 SM 3.0	65			
6 SM 7.1	36 SM 6.4	66			
7 SM 6.3	37 SM 7.5	67			
8 SM 5.3	38 SM 7.5	68			
9 SM 3.4	39 SM 4.3	69			
10 SM 6.9	40 SM 5.4	70			
11 SM 3.8	41 WA 7.9	71			
12 SM 6.7	42 SM 8.8	72			
13 SM 8.9	43 SM 8.3	73			
14 SM 3.1	44 SM 4.1	74			
15 SM 8.3	45 SM 4.0	75			
16 SM 3.2	46 SM 7.7	76			
17 SM 7.9	47 SM 5.0	77			
18 SM 4.0	48 SM 4.9	78			
19 SM 4.5	49 SM 7.6	79			
20 SM 6.8	50 SM 3.0	80			
21 SM 7.4	51 SM 8.5	81			
22 SM 4.1	52 SM 3.6	82			
23 SM 7.4	53	83			
24 SM 4.3	54	84			
25 SM 4.3	55	85			
26 SM 4.0	56	86			
27 SM 8.0	57	87			
28 SM 3.0	58	88			
29 SM 8.1	59	89			
30 SM 4.1	60	90			

Notes: Stake missing + rescaled



Colgate University Forest Carbon Data Sheet Date: 4/30/18

Parcel: HSN		Plot ID: 146		Waypoint #: 894	
Species	DBH	Species	DBH	Species	DBH
1	SM	8.6		61	
2	SM	6.3		62	
3	SM	9.6		63	
4	SM	2.6		64	
5	SM	10.7		65	
6	SM	12.6		66	
7	ECM	11.9		67	
8	WA	14.9		68	
9	SM	5.6		69	
10	SM	5.2		70	
11	ECM	4.2		71	
12	ECM	8.8		72	
13	WA	10.0		73	
14	WA	5.0		74	
15	SM	5.9		75	
16	SM	6.1		76	
17	SM	4.2		77	
18	SM	2.6		78	
19	SM	8.3		79	
20	SM	4.5		80	
21	SM	8.8		81	
22	WA	10.6		82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes:

Colgate University Forest Carbon Data Sheet Date: _____

Parcel: HSN		Plot ID: 172		Waypoint #: 864		
Species	DBH	Species	DBH	Species	DBH	
1	NS	8.7	31	NS	8.9	61
2	NS	9.1	32	NS	8.0	62
3	NS	8.6	33	NS	5.2	63
4	NS	10.6	34	NS	11.6	64
5	NS	9.6	35	NS	6.8	65
6	NS	6.5	36	NS	8.8	66
7	NS	10.5	37	NS	9.4	67
8	NS	12.1	38	NS	11.2	68
9	NS	7.6	39	NS	7.4	69
10	NS	6.8	40	NS	6.0	70
11	NS	7.1	41	NS	7.6	71
12	NS	8.2	42	NS	11.4	72
13	NS	11.2	43	NS	7.8	73
14	NS	10.0	44	NS	9.8	74
15	NS	8.1	45	NS	15.2	75
16	NS	6.8	46	NS	6.4	76
17	NS	7.9	47	NS	7.5	77
18	NS	8.0	48	NS	9.6	78
19	NS	9.8	49	NS	11.0	79
20	NS	7.2	50	NS	8.0	80
21	NS	10.4	51	NS	8.6	81
22	NS	6.6	52	NS	9.1	82
23	NS	10.7	53	NS	12.7	83
24	NS	8.3	54	NS	9.1	84
25	NS	6.0	55			85
26	NS	6.7	56			86
27	NS	4.4	57			87
28	NS	7.0	58			88
29	NS	4.9	59			89
30	NS	5.2	60			90

Notes: *Strike missing & replaced; willow plantation*

Colgate University Forest Carbon Data Sheet Date: 4/10/18

Parcel: HCS		Plot ID: 022		Waypoint #: 938	
Species	DBH	Species	DBH	Species	DBH
1				61	
2				62	
3				63	
4				64	
5				65	
6				66	
7				67	
8				68	
9				69	
10				70	
11				71	
12				72	
13				73	
14				74	
15				75	
16				76	
17				77	
18				78	
19				79	
20				80	
21				81	
22				82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes: *Strike missing & replaced; willow plantation*

Colgate University Forest Carbon Data Sheet Date: 4/10/18

Parcel: HSS		Plot ID: 023		Waypoint #: 993	
Species	DBH	Species	DBH	Species	DBH
1	WR	3.8	31		61
2	AB	3.2	32		62
3	WR	6.1	33		63
4	WR	4.0	34		64
5	GR	12.8	35		65
6	GR	11.6	36		66
7	GR	10.7	37		67
8	WR	11.8	38		68
9	WR	4.0	39		69
10	WR	7.0	40		70
11	WR	9.6	41		71
12	WR	11.8	42		72
13	WR	15.9	43		73
14	WR	12.9	44		74
15	SM	7.0	45		75
16	SM	4.8	46		76
17	WR	6.7	47		77
18	GR	11.2	48		78
19	SM	10.8	49		79
20	SM	4.1	50		80
21	GR	10.1	51		81
22	AB	5.3	52		82
23	AB	3.3	53		83
24	GR	11.3	54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/10/18

Parcel: HSS		Plot ID: 024		Waypoint #: 845		
Species	DBH	Species	DBH	Species	DBH	
1	EH	8.0	31	EH	3.6	61
2	AB	6.1	32	EH	6.2	62
3	EH	11.1	33	EH	10.0	63
4	WR	2.6	34			64
5	WA	5.8	35			65
6	SM	3.2	36			66
7	EH	7.7	37			67
8	WA	11.7	38			68
9	WA	8.6	39			69
10	EH	8.3	40			70
11	EH	6.9	41			71
12	WR	15.9	42			72
13	WR	9.2	43			73
14	WR	18.2	44			74
15	WR	8.0	45			75
16	EH	3.5	46			76
17	WR	10.2	47			77
18	EH	10.4	48			78
19	WR	4.3	49			79
20	EH	7.1	50			80
21	EH	14.4	51			81
22	EH	13.2	52			82
23	EH	6.0	53			83
24	EH	4.2	54			84
25	EH	4.2	55			85
26	EH	8.1	56			86
27	EH	16.2	57			87
28	WR	12.0	58			88
29	EH	11.7	59			89
30	EH	3.0	60			90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/10/18

Parcel: HSS		Plot ID: 025		Waypoint #: 847	
Species	DBH	Species	DBH	Species	DBH
1	WA	27.2	31		61
2	SM	8.5	32		62
3	SM	17.8	33		63
4	SM	11.2	34		64
5	SM	7.7	35		65
6	EH	11.4	36		66
7	EH	18.6	37		67
8	SM	7.7	38		68
9	SM	12.7	39		69
10	SM	5.7	40		70
11	SM	9.3	41		71
12	EH	20.1	42		72
13	EH	19.7	43		73
14	WR	20.3	44		74
15	SM	17.3	45		75
16	WR	3.2	46		76
17	SM	7.8	47		77
18	AB	4.0	48		78
19	SM	5.7	49		79
20	SM	4.9	50		80
21	SM	2.3	51		81
22	SM	8.3	52		82
23	SM	9.9	53		83
24	SM	5.2	54		84
25	SM	5.2	55		85
26	SM	4.2	56		86
27	SM	4.2	57		87
28			58		88
29			59		89
30			60		90

Notes:



Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: H53 Plot ID: 026 Waypoint #: 87

Species	DBH	Species	DBH	Species	DBH
SM	10.7	EH	3.5		
EH	6.5	SM	12.0		
HI	13.1	AB	5.1		
EH	4.4				
HI	19.2				
SM	13.2				
EH	3.0				
BA	17.4				
EH	4.2				
SM	10.5				
SM	6.8				
SM	13.1				
AB	5.9				
AB	9.5				
EH	4.0				
SM	14.0				
EH	4.2				
EH	4.1				
SM	22.2				
BA	12.6				
EH	11.4				
EH	3.0				
AB	9.3				
EH	5.8				
SM	7.8				
SM	7.4				
SM	11.1				
EH	5.1				
SM	7.9				
SM	18.1				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: H53 Plot ID: 027 Waypoint #: 85

Species	DBH	Species	DBH	Species	DBH
AB	8.3				
AB	12.1				
SM	13.9				
NRD	24.5				
SM	21.5				
SM	21.5				
SM	5.7				
AB	4.4				
AB	7.7				
AB	4.4				
SM	13.7				
SM	22.2				
SM	4.3				
SM	9.1				
SM	20.3				
AB	9.2				
AB	6.2				
SM	16.5				
EH	12.1				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: H53 Plot ID: 028 Waypoint #: 84

Species	DBH	Species	DBH	Species	DBH
SM	9.7				
SM	18.2				
SM	5.0				
SM	10.3				
SM	14.9				
SM	15.4				
SM	6.0				
SM	4.0				
SM	11.2				
SM	8.6				
SM	13.3				
SM	4.8				
SM	10.4				
SM	12.2				
SM	7.1				
SM	14.6				
SM	13.9				
SM	8.5				
SM	9.7				
SM	9.9				
SM	6.6				
SM	14.5				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: H53 Plot ID: 029 Waypoint #: 84

Species	DBH	Species	DBH	Species	DBH
EH	12.0				
AB	11.8				
EH	12.8				
EH	2.2				
EH	18.1				
EH	15.4				
EH	4.4				
EH	9.3				
EH	14.7				
EH	5.4				
EH	3.9				
AB	7.8				
WA	15.0				
SM	21.9				
SM	7.0				
SM	12.2				
SM	15.0				

Notes: State map replaced

Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: H53 Plot ID: 030 Waypoint #: 82

Species	DBH	Species	DBH	Species	DBH
EH	5.4				
AB	14.0				
AB	4.4				
AB	12.0				
BC	4.5				
EH	7.3				
EA	7.1				
WA	19.8				
EH	6.3				
HI	20.2				
HI	6.8				
WA	20.5				
AB	7.8				
EH	7.8				
AB	3.1				
SM	2.6				
EH	4.4				
EH	6.0				
AB	3.0				
HI	12.5				
EH	7.8				
WA	15.8				
EH	6.2				
HI	15.7				
EH	6.7				
SM	5.7				
SM	18.1				
EH	5.1				
EH	5.7				

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/10/10

Parcel: H53 Plot ID: 031 Waypoint #: 84

Species	DBH	Species	DBH	Species	DBH
HAN	5.0				
HAN	3.0				
HAN	8.9				
AP	6.7				
WA	18.6				
HAN	2.6				
HAN	9.8				
HAN	4.1				
AP	4.6				
AP	7.1				
AP	4.3				
AP	4.2				
AP	8.2				
AB	7.6				
HAN	5.2				
AP	6.9				
WA	5.6				
AP	7.1				
AP	6.2				
AP	5.2				
AP	5.6				
AP	6.5				
AP	6.6				
AP	9.8				
HAN	3.7				
HAN	3.2				
HAN	3.7				
AP	9.1				
AP	4.4				
AP	10.4				

Notes: State map replaced



Colgate University Forest Carbon Data Sheet Date: 4/2/18

Parcel: PF Plot ID: 062 Waypoint #: 016

Species	DBH	Species	DBH	Species	DBH
1	Pin	5.6	31		61
2	hax	5.1	32		62
3	hax	4.2	33		63
4	hax	4.0	34		64
5	hax	6.6	35		65
6	hax	5.8	36		66
7			37		67
8			38		68
9			39		69
10			40		70
11			41		71
12			42		72
13			43		73
14			44		74
15			45		75
16			46		76
17			47		77
18			48		78
19			49		79
20			50		80
21			51		81
22			52		82
23			53		83
24			54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/2/18

Parcel: PF Plot ID: 063 Waypoint #: 017

Species	DBH	Species	DBH	Species	DBH
1	h	12.1	31		61
2	hax	8.0	32		62
3	hax	5.5	33		63
4			34		64
5			35		65
6			36		66
7			37		67
8			38		68
9			39		69
10			40		70
11			41		71
12			42		72
13			43		73
14			44		74
15			45		75
16			46		76
17			47		77
18			48		78
19			49		79
20			50		80
21			51		81
22			52		82
23			53		83
24			54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/2/18

Parcel: PF Plot ID: 068 Waypoint #: 016

Species	DBH	Species	DBH	Species	DBH
1	sh	16.2	31		61
2	sh	13.8	32		62
3	sh	8.6	33		63
4	bc	18.0	34		64
5	sh	6.5	35		65
6	sh	14.7	36		66
7	sh	15.8	37		67
8	sh	9.4	38		68
9	sh	23.0	39		69
10	sh	9.2	40		70
11	sh	15.0	41		71
12	lg	12.7	42		72
13			43		73
14			44		74
15			45		75
16			46		76
17			47		77
18			48		78
19			49		79
20			50		80
21			51		81
22			52		82
23			53		83
24			54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/2/18

Parcel: PF Plot ID: 065 Waypoint #: 019

Species	DBH	Species	DBH	Species	DBH	
1	hax	4.8	31	bl	10.0	61
2	hax	4.0	32			62
3	bl	8.2	33			63
4	qp	8.3	34			64
5	rm	4.9	35			65
6	sm	7.2	36			66
7	bl	9.5	37			67
8	bl	10.2	38			68
9	ar	6.7	39			69
10	sm	8.0	40			70
11	bl	8.9	41			71
12	bl	12.7	42			72
13	bl	7.2	43			73
14	hax	4.4	44			74
15	bl	9.6	45			75
16	bl	13.6	46			76
17	bl	12.5	47			77
18	bl	10.5	48			78
19	sm	3.4	49			79
20	bl	10.0	50			80
21	qp	8.8	51			81
22	hax	4.3	52			82
23	sm	3.7	53			83
24	bc	2.6	54			84
25	bc	9.2	55			85
26	rp	8.2	56			86
27	bl	8.0	57			87
28	bl	9.0	58			88
29	bl	12.6	59			89
30	bl	25.0	60			90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/2/18

Parcel: PF Plot ID: 066 Waypoint #: 021

Species	DBH	Species	DBH	Species	DBH
1	ms	4.0	31		61
2	L	17.8	32		62
3	L	15.6	33		63
4	L		34		64
5	ms	5.9	35		65
6	sm	4.1	36		66
7	L	8.1	37		67
8	REP	10.2	38		68
9	L	13.6	39		69
10	REP	11.0	40		70
11	REP	12.5	41		71
12	L	15.2	42		72
13	L	14.3	43		73
14	L	8.6	44		74
15	L	12.7	45		75
16	WA	3.0	46		76
17	WA	12.1	47		77
18	L	16.8	48		78
19	REP	11.7	49		79
20	REP	11.3	50		80
21	REP	12.3	51		81
22	HAW	4.5	52		82
23	RH	18.2	53		83
24			54		84
25			55		85
26			56		86
27			57		87
28			58		88
29			59		89
30			60		90

Notes:

Colgate University Forest Carbon Data Sheet Date: 4/2/18

Parcel: PF Plot ID: 061 Waypoint #: 020

Species	DBH	Species	DBH	Species	DBH	
1	my	12.0	31	gs	12.6	61
2	wa	4.2	32	sm	12.1	62
3	wa	7.0	33	gs	3.0	63
4	ost	5.0	34	ost	3.5	64
5	sh	4.7	35			65
6	ost	3.9	36			66
7	sh	7.6	37			67
8	wa	8.0	38			68
9	wa	11.0	39			69
10	ost	4.1	40			70
11	ost	5.6	41			71
12	wa	4.7	42			72
13	ost	3.5	43			73
14	ost	3.5	44			74
15	ost	4.1	45			75
16	ost	6.1	46			76
17	wa	12.2	47			77
18	wa	5.7	48			78
19	ost	3.7	49			79
20	ost	7.9	50			80
21	ost	3.5	51			81
22	hi	6.3	52			82
23	wa	13.1	53			83
24	gs	14.6	54			84
25	gs	5.2	55			85
26	gs	3.0	56			86
27	ost	5.8	57			87
28	gs	4.9	58			88
29	gs	13.2	59			89
30	gs	13.5	60			90

Notes:



Colgate University Forest Carbon Data Sheet Date: 4/6/14

Parcel: 72 Plot ID: 060 Waypoint # 87P

Species	DBH	Species	DBH	Species	DBH
1 WY 5.1 31				61	
2 o6 3.6 32				62	
3 WY 12.5 33				63	
4 WY 4.8 34				64	
5 SM 3.1 35				65	
6 o6 3.8 36				66	
7 WY 3.8 37				67	
8 WY 3.8 38				68	
9 WY 8.1 39				69	
10 WY 18.0 40				70	
11 o6 9.7 41				71	
12 WY 15.5 42				72	
13 WY 14.8 43				73	
14 WY 10.1 44				74	
15 o6 6.4 45				75	
16 SM 5.0 46				76	
17 WY 2.5 47				77	
18 o6 3.7 48				78	
19 SM 6.8 49				79	
20 GC 23.0 50				80	
21 WY 13.3 51				81	
22 SM 20.8 52				82	
23 o6 3.4 53				83	
24 o6 3.2 54				84	
25 o6 3.2 55				85	
26 o6 3.2 56				86	
27 o6 3.2 57				87	
28 o6 15.0 58				88	
29 AB 3.3 59				89	
30 GL 3.6 60				90	

Notes: *Stake missing & replaced*

Colgate University Forest Carbon Data Sheet Date: 4/6/14

Parcel: PF Plot ID: 059 Waypoint # 815

Species	DBH	Species	DBH	Species	DBH
1 SM 2.6 31				61	
2 SM 5.2 32				62	
3 AB 3.6 33				63	
4 SM 15.2 34				64	
5 SM 5.5 35				65	
6 SM 20.1 36				66	
7 SM 15.5 37				67	
8 SM 4.8 38				68	
9 SM 15.0 39				69	
10 SM 8.2 40				70	
11				71	
12				72	
13				73	
14				74	
15				75	
16				76	
17				77	
18				78	
19				79	
20				80	
21				81	
22				82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes: *Stake missing & replaced*

Colgate University Forest Carbon Data Sheet Date: 4/20/14

Parcel: PF Plot ID: 064 Waypoint # 820

Species	DBH	Species	DBH	Species	DBH
1 RM 13.2 31				61	
2 SM 3.1 32				62	
3 RM 9.6 33				63	
4 AP 4.2 34				64	
5 WY 4.3 35				65	
6 SM 7.4 36				66	
7 HAW 4.8 37				67	
8 SM 8.1 38				68	
9 RM 12.2 39				69	
10 RM 7.2 40				70	
11 AP 6.3 41				71	
12 HAW 4.5 42				72	
13 AP 8.4 43				73	
14 SM 9.1 44				74	
15 HAW 3.4 45				75	
16 RM 4.4 46				76	
17 HAW 8.6 47				77	
18 AP 5.7 48				78	
19 RM 14.2 49				79	
20 RM 12.2 50				80	
21 RM 4.3 51				81	
22 AP 5.5 52				82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes: *Stake missing & replaced*

Colgate University Forest Carbon Data Sheet Date: 5/9/14

Parcel: TH Plot ID: 162 Waypoint # 741

Species	DBH	Species	DBH	Species	DBH
1 SM 4.4 31				61	
2 SM 8.8 32				62	
3 SM 8.5 33				63	
4 SM 24.0 34				64	
5 SM 3.9 35				65	
6				66	
7 SM 19.6 37				67	
8 SM 16.6 38				68	
9 SM 3.8 39				69	
10				70	
11				71	
12				72	
13				73	
14				74	
15				75	
16				76	
17				77	
18				78	
19				79	
20				80	
21				81	
22				82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes: *Stake missing & replaced*

Colgate University Forest Carbon Data Sheet Date: 5/9/14

Parcel: TH Plot ID: 162 Waypoint # 741

Species	DBH	Species	DBH	Species	DBH
1 SM 4.4 31				61	
2 SM 8.8 32				62	
3 SM 8.5 33				63	
4 SM 24.0 34				64	
5 SM 3.9 35				65	
6 SM 19.6 36				66	
7 SM 16.6 37				67	
8 SM 3.8 38				68	
9				69	
10				70	
11				71	
12				72	
13				73	
14				74	
15				75	
16				76	
17				77	
18				78	
19				79	
20				80	
21				81	
22				82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes: *Stake missing & replaced*

Colgate University Forest Carbon Data Sheet Date: 5/9/14

Parcel: TH Plot ID: 163 Waypoint # 742

Species	DBH	Species	DBH	Species	DBH
1 SM 3.7 31				61	
2 EH 15.1 32				62	
3 SM 9.5 33				63	
4 SM 10.5 34				64	
5 AB 16.5 35				65	
6 AB 14.4 36				66	
7 AB 12.6 37				67	
8 AB 3.4 38				68	
9 AB 9.0 39				69	
10 EH 8.3 40				70	
11				71	
12				72	
13				73	
14				74	
15				75	
16				76	
17				77	
18				78	
19				79	
20				80	
21				81	
22				82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes: *Stake missing & replaced*



Colgate University Forest Carbon Data Sheet Date: 5/3/18

Parcel: 7H		Plot ID: 160		Waypoint #: 7H9	
Species	DBH	Species	DBH	Species	DBH
1	FLM	10.3		61	
2	YB	6.2		62	
3	YB	5.1		63	
4	AB	3.3		64	
5	EH	2.7		65	
6	AB	4.7		66	
7	OP	10.3		67	
8	OP	7.2		68	
9	WA	5.1		69	
10	WA	5.7		70	
11	WA	4.9		71	
12	WA	12.5		72	
13	WA	4.5		73	
14	WA	8.5		74	
15	WA	4.1		75	
16	WA	3.2		76	
17	OP	39.0		77	
18	WA	3.9		78	
19	WA	4.8		79	
20	WA	7.1		80	
21	WA	5.2		81	
22	WA	8.2		82	
23	SM	4.4		83	
24	WA	3.4		84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes: Stake missing & replaced

Colgate University Forest Carbon Data Sheet Date: 5/3/18

Parcel: 7H		Plot ID: 152		Waypoint #: 7H10	
Species	DBH	Species	DBH	Species	DBH
1	OST	3.3		61	
2	SM	16.5		62	
3	OST	3.7		63	
4	SM	12.1		64	
5	SM	10.0		65	
6	SM	13.5		66	
7				67	
8				68	
9				69	
10				70	
11				71	
12				72	
13				73	
14				74	
15				75	
16				76	
17				77	
18				78	
19				79	
20				80	
21				81	
22				82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 5/3/18

Parcel: 7H		Plot ID: 167		Waypoint #: 7H11	
Species	DBH	Species	DBH	Species	DBH
1	SM	18.1		61	
2	SM	6.5		62	
3	SM	4.5		63	
4	SM	9.7		64	
5	SM	14.1		65	
6	BC	21.6		66	
7	BC	11.8		67	
8	BC	19.2		68	
9	SM	3.2		69	
10	SM	13.2		70	
11	SM	12.6		71	
12				72	
13				73	
14				74	
15				75	
16				76	
17				77	
18				78	
19				79	
20				80	
21				81	
22				82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes: Recovered!

Colgate University Forest Carbon Data Sheet Date: 5/3/18

Parcel: 7H		Plot ID: 154		Waypoint #: 7H12	
Species	DBH	Species	DBH	Species	DBH
1	SM	12.4		61	
2	SM	11.2		62	
3	SM	13.4		63	
4	SM	16.8		64	
5	SM	13.4		65	
6	SM	11.0		66	
7	BC	21.4		67	
8	SM	15.9		68	
9	AB	8.0		69	
10				70	
11				71	
12				72	
13				73	
14				74	
15				75	
16				76	
17				77	
18				78	
19				79	
20				80	
21				81	
22				82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes:

Colgate University Forest Carbon Data Sheet Date: 5/3/18

Parcel: 7H		Plot ID: 153		Waypoint #: 7H13	
Species	DBH	Species	DBH	Species	DBH
1	SM	14.4		61	
2	SM	12.2		62	
3	SM	11.0		63	
4	SM	11.7		64	
5	SM	3.0		65	
6	SM	4.4		66	
7	OST	3.5		67	
8				68	
9				69	
10				70	
11				71	
12				72	
13				73	
14				74	
15				75	
16				76	
17				77	
18				78	
19				79	
20				80	
21				81	
22				82	
23				83	
24				84	
25				85	
26				86	
27				87	
28				88	
29				89	
30				90	

Notes: Stake missing & replaced

Colgate University Forest Carbon Data Sheet Date: 5/3/18

Parcel: 7H		Plot ID: 157		Waypoint #: 7H14	
Species	DBH	Species	DBH	Species	DBH
1	SM	25.2		61	
2	SM	6.1		62	
3	SM	5.7		63	
4	SM	3.2		64	
5	SM	15.9		65	
6	SM	17.9		66	
7	WA	2.6		67	
8	SM	8.6		68	
9	WA	19.3		69	
10	SM	14.8		70	
11	SM	6.0		71	
12	WA	14.3		72	
13	SM	7.9		73	
14	SM	13.8		74	
15	SM	6.2		75	
16	SM	9.2		76	
17	WA	9.4		77	
18	WA	8.5		78	
19	SM	11.0		79	
20	WA	15.4		80	
21	SM	4.4		81	
22	SM	3.6		82	
23	SM	16.2		83	
24	SM	3.5		84	
25	SM	12.2		85	
26	SM	18.7		86	
27				87	
28				88	
29				89	
30				90	

Notes: BC from 2018 Good



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