Pine Mushroom
Map Verification Project
for the
West Chilcotin

Submitted to

Yun Ka Whu'ten
Holdings Ltd.

March 10, 2006

Submitted by:
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Acknowledgements

Many people have committed their support to pine mushroom research in the West Chilcotin over a period 10 years. The Ulkatcho First Nation have provided ongoing backing and collaboration for efforts aimed at a greater understanding of pine mushroom habitat and management. Yun Ka Whu'ten Holdings Ltd (YKW) has continued to be a vehicle for the administration and implementation of pine mushroom research projects in the area and the Ministry of Forest Research Section in Williams Lake have supported these efforts through collaborative research and contributions of time and technical expertise expertise.

This project could not have taken place without the field crew, Dave Landon (DWB Forestry), Tanya Cahoose, Rochelle Gregg, Ronald Cahoose and Elliot Dester (YKW).

Cover photo courtesy of Becky Holte, 2001.

Abstract

This report presents the findings of a pine mushroom (*Tricholoma magnivelare*) habitat map verification project implemented in the West Chilcotin. The predictive pine mushroom habitat map was developed in 2003 for the area covered by the Itcha/Ilgachuz and Charlotte Alplands Terrestrial Ecosystem Mapping. The map was intended for use in; landscape planning, pine mushroom management and pine mushroom habitat modelling. Determining the reliability/accuracy of the map to predict pine mushroom presence is therefore important.

A total of 3062 polygons were mapped as suitable for pine mushroom habitat. Field assessment of 40 polygons was completed and analysed for this report. Of the 40 polygons surveyed, 29 or 72.5% were compliant with attributes identified as required for pine mushroom habitat. Using a binomial distribution with a 72.5% acceptance rate, the 90% confidence limits were 59% to 83% or roughly 24 to 33 out of 40.

The 72.5% acceptance rate is useful as an initial indicator of the probability of the presence of pine mushroom and would be useful for broader level planning exercises. For site specific situations the map should be supplemented with ground-truthing or other data sources.

The utility of the map would not be greatly altered unless it was found to be significantly more accurate, say in excess of 90%, or significantly less accurate, say less than 50%. Neither one of these scenarios is very likely. Nevertheless, it would be prudent to conduct another sample to confirm that the acceptance rate truly does fall within the indicated range.

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Introduction

Commercial mushroom harvesting is an important economic activity in many areas of British Columbia, the West Chilcotin Plateau being one area of significance. One estimate of the annual revenue from the harvest across BC indicates a range from $10-20 million (Olivotto 1999). Pine mushroom harvesting is an important recreational activity as well. Local mushroom pickers forage for pine mushrooms regardless of prices or productivity levels. Hence, as a recreation activity, although difficult to quantify monetarily, pine mushroom picking is valuable.

The pine mushroom has been described as an ectomycorrhizal fungus, existing in a symbiotic relationship with a variety of live tree species. Although its characterization as ectomycorrhizal has recently been brought into question (Bravi and Chapman 2006) it is clear that the pine mushroom requires a living tree host to produce fruiting bodies. Local research has also indicated that the Pine mushroom may be an indicator of Old Forest Condition for pine leading and pure pine stands within the West Chilcotin.

In 1995 a Pine Mushroom study was developed and in 1997 was initiated for the Anahim Lake Area. The focus of this research was to describe the ecology of the Pine Mushroom across the region and to develop management strategies to preserve it.

It was demonstrated in the West Chilcotin that pine mushrooms occupy high elevation pine leading stands, or at lower elevations, Douglas-fir leading and mixed lodgepole pine-Douglas-fir stands, that are mature to old in structure. Pine mushroom producing stand ages range from 70 to 240 years with most of the production occurring in stands of 120 to 160 years. Soils in producing patches are coarse to very coarse and understory cover is low.

The intent of the research was to develop a management strategy for the pine mushroom in the West Chilcotin. Due to the infestation of the mountain pine beetle in the area and the beetles preference for mature to old pine trees, pine mushroom habitat falls within the high susceptibility rating for beetle impacted stands. As a result the management strategy is being revised to incorporate considerations for beetle effects as well as salvage logging. Of key importance to the strategy was the development of a method for predicting pine mushroom habitat across the West Chilcotin landscape.

Attribute data collected during the ecological study on pine mushroom in the region was used in a GIS exercise to create a predictive map of pine mushroom habitat. Forest cover and the Itcha/Ilgachuz and Charlotte Alplands Terrestrial Ecosystem Map inventory data bases were used for this exercise. Predictive mapping was considered necessary for developing and implementing spatially explicit management strategies as well as for modelling mushroom production over time (Olivotto 1999, Chapman and Bravi 2003).

Once the predictive map was developed for the area, its reliability as a management tool had to be assessed. Because of the increasing pressure on forest ecosystems resulting from an expedited timber supply brought on by the Mountain Pine Beetle infestation, the urgency for effectively managing for non-timber resource has increased (Pedersen 2004). As a result, Yun Ka Whu'ten Holdings used funding from their Forest For Tomorrow allocation to test the reliability of the pine mushroom predictive mapping.

This report describes the map verification project conducted in the Anahim Supply block to assess the utility of the predicted pine mushroom map developed in 2004.

If the map proves to be a reliable tool for assessing potential pine mushroom habitat, then habitat modelling for pine mushrooms in the West Chilcotin can be done. Furthermore, information from this research will also allow determination of the level of confidence in habitat runs done in the Type 2 silviculture analysis and the Fire rehabilitation planning. These exercises will assist us in understanding the real effects that management recommendations for the pine mushroom will have on Timber Supply as well as the effects timber management will have on pine mushroom supply.

Methods

The 2005 predictive pine mushroom map verification study was conducted in the Anahim Supply block on the West Chilcotin Plateau within the Williams Lake TSA. The area falls within the Traditional Territory of the Ulkatcho First Nation. This area was selected for study as previous ecological research had characterized the nature of pine mushroom producing areas in the West Chilcotin (Chapman and Bravi 2003). Terrestrial Ecosystem Mapping in the area was available as a GIS layer as was Forest Cover data and these two data sources were the basis for the mapping exercise.

Predictive polygons were spatially delineated based on the attributes shown in Table 1. Due to the relatively limited scope of inventory data that comprises most map bases, only a limited number of attributes consistent with pine mushroom habitat could be queried for predictive mapping purposes.

Table 1.

Vegetation Resource Inventory		**Terrestrial Ecosystem Mapping**	
Attribute	***Value***	***Attribute***	***Value***
Species %	Pine ≥ 60	Soil Texture	Sand or Gravel/ Coarse
% Cover	Herb ≤ 50	Drainage Class	Rapid to Well
% Crown closure	Shrub ≤ 50		
Age	70 ≥ 300		

Polygons were ground surveyed for consistency with the attributes used to define potential pine mushroom producing areas. Pine mushroom presence within the polygon was also surveyed (the surveying was done during pine mushroom season).

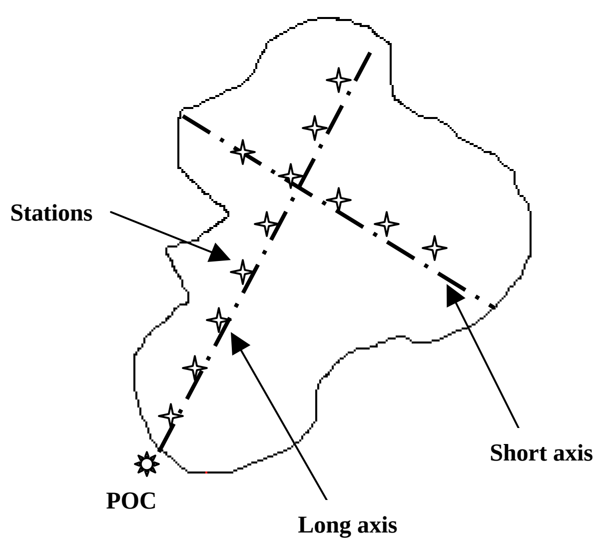
Polygon Selection

Polygons to be field assessed were selected randomly by assigning each mapped polygon a unique number. A random list of these numbers was then generated in MS Excel using the random number list function. Polygons were then field visited in order of their listing. Polygons that were determined to be further than a 2-hour travel distance from the office were dropped and the next polygon on the list was selected for field assessment.

Transect Delineation

Field surveys were conducted on 2 line transects placed perpendicular to each other within each polygon (Figure 1). Transect locations were determined via a GIS exercise during the initial planning process. Randomly selected polygons were examined in Arcview and a point of commencement was assigned on the edge of the polygon where the long axis of the survey would run. The short axis of the transect was then placed perpendicular to the long axis at the widest point of the polygon. GPS locations for each transect and distances between stations were then generated. Transects were divided into no less than 12 stations that were equidistant from each other. POC GPS locations were uploaded into hand held GPS's for field location and hip chains were used to chain distances between stations.

Figure 1.



Field Survey Direction Package

Polygon 2300

POC - 10-33245-59718

Stn 1 - 45^{o} @ 50m from POC

Stn 1 to 8 - 45^{o} @100m

Stn 9 - 285^{o} @ 85m from Stn 6

Stn 10 to12 - 135^{0} @85m from Stn 6

Field Survey Methods

The mapping of predicted pine mushroom habitat in the West Chilcotin was based on site characteristics of pine mushroom producing patches listed in Table 1 and field assessment of these attributes was conducted at each station within the sample polygons.

Soils: Soil textures were determined by taking an auger sample of soil to 20cm at the first station in each polygon. Samples were placed in labelled dri-rite bags for later soil textural determination by the hydrometer method. Subsequent samples were taken at stations in which hand assessment of the soil suggested that a texture change had taken place. These additional samples were also kept for textural analysis. All soil textures were analysed in the lab for percent coarse fragments, sand, silt and clay and the soils were placed into soil family particle size classes (Canadian System of Soil Classification) which, are soil groupings that are felt to combine soils with similar physical properties. Soils suitable for pine mushroom production are considered to be coarse or sandy (Chapman and Bravi 2003).

Drainage Class: Drainage classification was assigned based on soil texture classification and slope position at each station within the polygons. Slope position was determined using the slope position classification diagram from the *Field Manual for Describing Terrestrial Ecosystems/ Land Management Handbook NUMBER 25.* All slope positions except toe or depression which also had coarse or sandy textured soils were classed as well to rapidly drained.

Age: A plot was assessed using a 2 BAF (basal area factor) prism. Dominant or co-dominant trees that fell within the plot were determined. A co-dominant tree was then cored and marked. Increment core samples were placed in straws, labelled and brought to the lab for counting rings using a dissecting scope. A correction factor of 10 years was used for all samples as cores were taken at DBH (diameter at breast height).

Leading Species: Trees within the 2 BAF plot (describe above) were counted and species noted. Leading species was then determined as the tree species that made up $\geq$ 60% of the trees within the plot.

Herbaceous percent cover and shrub crown closure: An estimate of a 20m x 20m plot was assessed for percent cover of the herbaceous layer and the shrub layer. Percent covers were scored in classes of 0-5, 5-10, 10-25 and >25 for species in each layer (herbaceous and shrub).

Pine Mushroom Presence: Pine mushrooms were searched for along the entire transect through each polygon. Mushrooms found adjacent to the polygon up to a visible distance were noted. Number of mushrooms found, distance along transect line, nearest station and bearing from transect to mushrooms were noted. Distance from mushroom to transect line was estimated and noted.

Data Analysis Methods

Pine Mushroom predictive map attribute data was entered into an MS Excel spreadsheet. The data was sorted by Polygon and station for analysis. Attributes were scored for compliance at each station within a Polygon. If the station passed the criteria identified in Table 1 a score of 1 was given for that attribute at that station. If the criteria was not met, a score of 0 was given. All stations that scored a 6 were said to comply with predictive mapping criteria. The percent of stations that complied with all attribute requirements for each polygon was calculated and a polygon was graded a pass at $\geq$ 50%. An example of the scoring is given in Table 2.

Table 2.

Example:

Polygon	Station	LS	Age	Soil text.	Drainage	Shrub closure	Herb. cover	Score	Polygon Compliance
86	1	1	1	1	1	1	1	6	
86	2	1	1	1	1	1	1	6	
86	3	1	0	1	0	1	1	4	
86	4	0	0	0	0	1	1	2	
86	5	1	1	1	1	0	1	5	
86	6	1	1	1	1	1	1	6	
86	7	0	1	0	0	1	1	3	
86	8	1	0	1	0	1	1	4	4/12 polygons passed for all attributes
86	9	1	0	1	0	1	1	4	
86	10	1	0	1	0	0	1	3	
86	11	0	1	0	0	0	1	2	33% Polygon Fails
86	12	1	1	1	1	1	1	6	

Sample Size Considerations

Before conducting a full verification of the mapping project it was necessary to do a preliminary determination of the proportion of successful polygons in order to determine the size of the sample necessary to do a reliable verification of the mapping. A staged sampling approach (after Moon et al 2004) was used. The stage 1 sampling was conducted this year. The timing and amount of funding limited the number of polygons that could sampled, but an adequate number of polygons were examined to complete the Stage 1 sampling. The confidence interval for the Stage 1 sampling and the indicated sample size for a full assessment, are reported below.

Results

A total of 3062 polygons were mapped as potential pine mushroom producing areas within the area for which we had data (the area covered by the Itchas/Ilgatchas Terrestrial Ecosystem Mapping). Forty polygons were field verified in this project in the Stage 1 Sampling.

Of the 40 polygons surveyed, 29 or 72.5% were compliant with $\geq$ 50% of the stations having all of the attributes identified as required for pine mushroom habitat. The area of the polygons sampled ranged from 1.1 hectare to 240.3 hectares.

Using a binomial distribution with a 72.5% acceptance rate, the 90% confidence limits were 59% to 83% (after Zar, 1984) or we could say with 90% confidence that between 24 and 33 out of 40 polygons met the criteria for acceptance.

Discussion and Recommendations

Accuracy of the Map: The most probable indicated level of acceptance of the mapping is 72.5%. The lower confidence limits at 95% and 90% respectively are 56% and 59%. This means that having examined 40 polygons, we are 90% certain that the level of acceptance for all polygons, would be greater than 59%. Given that pine mushroom polygons occupy something less than 10% of the landscape, being able to predict pine mushroom producing areas about 60% of the time (lower confidence limit), is a very great improvement over chance. At the upper 90% confidence limit or 83%, the value of the map is obvious. However, the number that should be given most weight is the 72.5% as that is the most probable level of acceptance that the mapping will achieve. This level of acceptance is useful as an initial indicator of the probability of the presence of pine mushroom and could be used for broader level planning exercises. For site specific situations the map should be supplemented with ground-truthing or other data sources.

A level of accuracy of 72.5% is in keeping with the accuracy of the data sources that were used to determine the polygons. Both the Forest Cover maps and the TEM are air photo derived databases and subject to error. Some important variables, like age class in the Forest Cover, are notoriously inaccurate and the TEM mapping for Itcha/Ilgachuz Charlotte Alplands had very poor overlap for some biogeoclimatic units. Combining these two datasets could compound the error so to get an accuracy of 72.5% is as good as could be hoped and it would probably be necessary to have better data sources to work with to improve upon this.

Need for Better Soil and Ecosystem Data: Improved soil and ecosystem mapping, perhaps PEM with soil textural data, may prove to be of great benefit to management of pine mushrooms and many other resources as well. If a pilot project to assess the potential to map soils is implemented it should be conducted in an area known to produce pine mushrooms.

Need for Additional Verification: The initial sampling indicates an acceptance rate of 72.5%. One opinion of acceptable power for a verification survey is plus or minus 5% of the mean with 90% confidence (Moon et al, 2004). Using the determined acceptance rate for this map, sampling to achieve this narrow of a confidence interval would require an approximate sample size of 230 (presuming that the acceptance rate did not change with further sampling), (determined using the Excel bionomdist function for +/- 5% of 0.725 of the sample size).

Before determining how much further verification should be done to narrow confidence intervals, it is necessary to make a decision about what would be considered an acceptable or usable accuracy for the map. Currently the 90% confidence interval is quite large, ranging from 59% to 83% acceptance. The fundamental question is, would the value of the map be greatly altered if further map verification indicated the maps accuracy was very much closer to 60% or 80%. Both ends of this spectrum indicate a very much greater probability than chance that the mapped polygon is good pine mushroom producing ground. The utility of the map would not be greatly altered unless it was found to be significantly more accurate, say in excess of 90%, or significantly less accurate, say less than 50%. Neither one of these scenarios is very likely. Nevertheless, it would be prudent to conduct another sample to confirm that the acceptance rate truly does fall within the indicated range.

With any one time sampling event, there is a small probability that due to chance alone, the estimate of the accuracy could be outside of the confidence limits. This follows from purely mathematical principles and is in addition to other possibilities such as operator error. If another similar sized sample found an acceptance rate greatly outside of what this sample found, then the map would need to be much more carefully checked. If another sample found the accuracy to be similar to this assessment, then we could say with a very high degree of confidence that the accuracy is within the indicated range. In addition, this verification project did not check the accuracy of the non-mapped areas. Further map verification should incorporate examination of the transition from producing areas to putative non-producing areas to confirm whether or not the putative non-producing areas do in fact have the characteristics of non-producing areas, therefore, we recommend that another verification be conducted next fall, examining a further 40 polygons.

Exploration for New Pine Mushroom Producing Areas: The model seems to be able to find good potential pine mushroom producing areas with a frequency much greater than chance. As such it might be a useful tool to help find new pine mushroom patches in areas where suitable soil and vegetation data exist. Many areas of the province have not been thoroughly examined for pine mushrooms, for example much of the area west of Quesnel. There might be significant economic benefits to small communities in danger of being affected by timber shortages to develop their pine mushroom resource.

Existing Data Collection Meeting Its Own Promise: Data on some attributes that were indicated as having been collected such as herb and shrub cover, were only collected intermittently. If all the data that might be collected in the Vegetation Resources Inventory and TEM, were in fact regularly collected, these data sources would be much more useful.

Collect Soil Textural Data: Any further ecosystem or soil mapping done in potential pine mushroom producing areas should collect proper soil texture data. Soil textural descriptions that combine coarse fragments and the fine fraction (as was used in the TEM) should be avoided.

Use of Map for Management: The predictive pine mushroom map was created as a tool to assist in the spatial delineation of management recommendations for pine mushroom in the West Chilcotin. The impacts of the current mountain pine beetle epidemic as well as the expedited harvest in response to it will significantly affect the environment including pine mushroom habitat (Pedersen et. al. 2004). Spatial delineation of this economically valuable resource is crucial for planning and execution of the salvage harvest. The most probable accuracy of the map is 73%. This is accurate enough for landscape level applications. Where there are site specific situations of particular significance, the map will need to be supplemented with either ground observations or area specific knowledge.

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Appendix

Includes:
Summary Data
Field Data
Soil Data
Age Data

Pine Mushroom Map Verification Project – Summary Data

Polygon No.	Sample No.	Polygon Area (ha)	Field Transect Length (m)	Bearing followed (o)	# Stns correct for Leading Species	# Stn's correct for Age	# Stn's correct for Shrub Cover	# Stn's correct for Herb Cover	# Stn's correct for Soil Texture	# Stn's correct for Drainage	% Stn's Pass	Pass/Fail (1/0)
86	13	1.8	480		13	7	12	13	13	11	38%	0
116	12	11.5	760		5	7	12	12	4	4	25%	0
138	10	8.4	530		8	10	7	10	10	10	50%	1
220	12	16.3	750		12	12	8	12	12	9	42%	0
233	12	44.4	2040		12	11	12	12	12	10	83%	1
238	10	9.6	660		10	8	12	12	10	10	80%	1
240	12	13.3	610		12	12	11	12	12	6	50%	1
259	11	1.1	310		11	9	11	11	11	11	82%	1
316	13	36.3	1140		13	13	12	13	13	5	42%	0
320	12	19.6	690		12	12	12	12	12	12	100%	1
1461	12	43	1150		12	12	12	12	12	10	83%	1
355	12	18	880		12	12	12	12	12	11	92%	1
413	12	10.6	910		12	12	11	12	8	8	58%	1
420	12	55.8	710		11	11	10	11	8	7	58%	1
455	12	43.2	650		12	12	12	12	12	12	100%	1
544	12	1.05	220		12	5	11	12	12	12	42%	0
563	12	2.7	480		12	12	8	12	7	7	42%	0
590	12	93.4	1240		12	12	12	12	12	12	100%	1
637	9	24.9	1190		7	5	9	9	8	7	56%	1
1124	13	7.7	300		13	11	11	13	13	12	62%	1
1326	12	2.3	410		12	11	12	12	12	11	83%	1
1485	13	25.5	1050		7	6/7	11	13	13	12	50%	1

1551	12	15.8	760		12	12	12	12	12	9	75%	1
1567	13	4.6	430		13	13	13	13	13	12	92%	1
1632	12	6	580		10	12	11	12	12	11	83%	1
1648	13	62.8	1360		13	11/12	12	13	13	12	83%	1
1691	12	2.6	280		7	9/11	12	12	12	12	55%	1
1783	12	79.4	1410		12	5/10	11	12	8	8	27%	0
1803	12	10.7	710		12	12	9	12	12	12	75%	1
1808	13	8.7	550		13	13	12	13	13	12	92%	1
1848	12	12.9	840		12	12	12	12	10	9	75%	1
1888	12	5.3	470		12	12	11	12	12	12	92%	1
1959	12	9.6	590		12	7/11	10	12	12	7	27%	0
2041	12	2.3	350		10	7/11	11	12	10	9	27%	0
2064	12	10.9	650		12	1/8	10	12	11	11	8%	0
2109	12	86	1430		12	12	10	12	12	12	83%	1
2113	12	25.2	1240		12	6	12	12	12	12	50%	1
2473	12	240.3	2570		12	6	12	12	12	11	50%	1
2568	13	8	670		13	6	13	13	13	12	62%	0
2916	12	24.1	730		10	12	12	12	12	8	67%	1

YKW 2005 Map Verification Project - Field Data

Poly #	Bear	Dist	Plot #	Aspect	Slope	Meso slope	B2 sp1	B2 sp1 %	B2 sp2	B2 sp2 %	B2 sp3	B2 sp3 %	C sp1	C sp1 %	C sp2	C sp2 %	C sp3	C sp3 %	sp1	#sp 1	sp1 <12 cm	sp2	#sp 2	sp 2 <12 cm	sp3	#sp 3	Mushroom	Dist	Bear	Nearest Stn
86	280	20m	1	N E	3	Toe	Soapberry	5-10	Black Twinberry	0-5	Rose	0-5	Twinflower	>25	Bunchberry	5-10	Wintergreen	0-5	Pine	14										
86	280	35m	2	NE	3	Toe	Soapberry	>25	Labrador Tea	0-5	Rose	0-5	Kinicknick	>25	Twinflower	0-5	Strawberry	0-5	Pine	14										
86	280	35m	3	n/a	n/a	Level	Soapberry	10-25	Juniper	5-10	Rose	0-5	Kinicknick	>25	Twinflower	5-10	Strawberry	0-5	Pine	12										
86	280	35m	4	n/a	n/a	Level	Juniper	10-25	Soapberry	5-10	Rose	0-5	Kinicknick	>25	Twinflower	5-10	Strawberry	0-5	Pine	12										
86	280	35m	5	n/a	n/a	Level	Soapberry	0-5	Juniper	0-5			Kinicknick	>25	Twinflower	0-5	Crowberry	0-5	Pine	11										
86	280	35m	6	n/a	n/a	Level	Soapberry	0-5	Rose	0-5			Twinflower	10-25	Kinicknick	5-10	Strawberry	0-5	Pine	11										
86	280	35m	7	n/a	n/a	Level	Soapberry	5-10	Juniper	0-5	Rose	0-5	Kinicknick	>25	Twinflower	0-5	Strawberry	0-5	Pine	4		Spruce	1							
86	280	35m	8	n/a	n/a	Level	Soapberry	5-10	Juniper	0-5	Rose	0-5	Kinicknick	>25	Twinflower	0-5	Bunchberry	0-5	Pine	3										
86	280	35m	9	n/a	n/a	Level	Soapberry	0-5	Juniper	0-5	Rose	0-5	Kinicknick	>25	Twinflower	5-10	Strawberry	0-5	Pine	5										
86	280	35m	10	n/a	n/a	Level	Soapberry	5-10	Juniper	0-5	Rose	0-5	Kinicknick	>25	Twinflower	0-5	Strawberry	0-5	Pine	9										
86	280	35m	11	n/a	n/a	Level	Soapberry	5-10	Juniper	0-5	Rose	0-5	Kinicknick	>25	Twinflower	5-10	Strawberry	0-5	Pine	11										
86	10	35m	12	n/a	n/a	Level	Soapberry	5-10	Juniper	0-5	Rose	0-5	Twinflower	10-25	Kinicknick	0-5	Strawberry	0-5	Pine	8										
86	190	35m (from Stn 6)	13	n/a	n/a	Level	Soapberry	0-5	Rose	0-5			Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Pine	14										
116	70	30m	1	n/a	n/a	Level	Willow	5-10	Juniper	0-5	Black Twinberry	0-5	Bunchberry	0-5	Twinflower	0-5	Strawberry	0-5	Pine	4		Spruce	4							
116	70	60m	2	E	2	Upperslope	Juniper	10-25	Soapberry	5-10	Rose	0-5	Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Pine	12		Spruce		4						
116	70	60m	3	S	1	Lower Slope	Birch leaf	5-10	Soapberry	0-5	Juniper	0-5	Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Pine	16		Spruce	3							
116	70	60m	4	W	7	Upperslope	Juniper	5-10	Soapberry	5-10	Rose	0-5	Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Pine	5		Spruce	5							
116	70	60m	5	SW	2	Upperslope	Willow	0-5	Birch Leaf	0-5	Rose	0-5	Toadflax	0-5	Bunchberry	0-5	Twinflower	0-5	Spruce	15		Pine	5							
116	70	60m	6	n/a	n/a	Level	Black Twinberry	5-10	Willow	5-10	Rose	0-5	Twinflower	10-25	Bunchberry	0-5	Strawberry	0-5	Spruce	9										
116	70	60m	7	SW	14	Lower Slope	Black Twinberry	5-10	Birch Leaf	0-5	Rose	0-5	Bunchberry	5-10	Toadflax	0-5	Twinflower	0-5	Spruce	14		Pine	4							
116	70	60m	8	n/a	n/a	Level	Willow	0-5	Black Twinberry	0-5			Twinflower	5-10	Horsetail	0-5	Toadflax	0-5	Spruce	14		Pine	2		Poplar	5				
116	70	60m	9	n/a	n/a	Level	Juniper	5-10	Soapberry	0-5	Black Twinberry	0-5	Twinflower	5-10	Bunchberry	0-5			Spruce	9		Pine	8		Poplar	1				

116	70	60m	10	n/a	n/a	Level	Willow	10-25	n/a		n/a		Horsetail	>25	Twinflower	5-10	Bunchberry	0-5	Spruce	17		Pine	2							
116	70	60m	11	dropped to wet			n/a		n/a		n/a		n/a		n/a		n/a		n/a											
116	340	60m (from Stn 6)	12	n/a	n/a	Level	Willow	10-25	Black Twinberry	0-5			Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Spruce	9		Pine	3							
138	210	40m	1	NW	5	Lower Slope	Soapberry	5-10	Juniper	0-5	Rose	0-5	Bunchberry	5-10	Twinflower	0-5	Toadflax	0-5	Pine	10	3									
138	210	40m	2	NW	3	Lower Slope	Soapberry	5-10	Birch Leaf	0-5	Juniper	0-5	Twinflower	5-10	Bunchberry	0-5	Kinicknick	0-5	Pine	13		Spruce	1							
138	210	40m	3	NW	4	Lower Slope	Juniper	0-5	Soapberry	0-5			Twinflower	5-10	Bunchberry	0-5	Wintergreen	0-5	Pine	14	9									
138	210	40m	4	NW	3	Crest	Juniper	5-10	Rose	0-5	Gooseberry	0-5	Twinflower	10-25	Kinicknick	0-5	Bunchberry	0-5	Pine	11	1									
138	210	40m	5	SW	21	Upperslope	Juniper	>25	Soapberry	5-10	Rose	0-5	Twinflower	10-25	Kinicknick	5-10	Bunchberry	0-5	Pine	10		Spruce	7							
138	210	80m	6	SW	15	Upperslope	Juniper	>25	Soapberry	10-25	Rose	0-5	Twinflower	5-10	Bunchberry	0-5	Kinicknick	0-5	Pine	18		Spruce	4							
138	210	40m	7	NW	3	midslope	Juniper	0-5	Rose	0-5	Soapberry	0-5	Twinflower	0-5	Bunchberry	0-5			Spruce	10		Pine	6							
138	120	40m (from stn 4)	8	NW	2	midslope	Juniper	0-5	Birch Leaf	0-5	Soapberry	0-5	Twinflower	5-10	Bunchberry	0-5	Kinicknick	0-5	Spruce	15		Pine	4							
138	120	40m	9	NW	9	Upperslope	Soapberry	>25	Birch Leaf	5-10	Alder	0-5	Twinflower	5-10	Bunchberry	0-5	Kinicknick	0-5	Pine	13		Spruce	2							
138	300	120m (from stn 4)	10	SW	12	midslope	Juniper	10-25	Soapberry	5-10	Black Twinberry	0-5	Kinicknick	10-25	Twinflower	5-10	Strawberry	0-5	Pine	8										
220			1	n/a	n/a	Crest	Willow	0-5	Juniper	0-5			Kinicknick	5-10	Crowberry	10-25	Bunchberry	0-5	Pine	17		Spruce	1		Balsm	1				
220	290	60m	2	S	10	midslope	Alder	>25	Willow	10-25			Bunchberry	5-10	Twinflower	0-5	Milifolia	0-5	Pine	17		Spruce	1		Balsm	1				
220	290	60m	3	S	5	Upperslope	Alder	>25	Labrador Tea	0-5	Soapberry	5-10	Bunchberry	10-25	Crowberry	0-5			Pine	10		Spruce	5		AT	3				
220	290	60m	4	S	3	Crest	Alder	10-25					Milifolia	10-25	Bunchberry	5-10	Crowberry	0-5	Pine	19		Spruce	1							
220	290	60m	5	S	3	Crest	Alder	5-10					Bunchberry	5-10	Crowberry	0-5	Twinflower	0-5	Pine	24		Spruce	1							
220	290	60m	6	S	3	Upperslope	Alder	>25	Juniper	0-5			Crowberry	5-10	Bunchberry	0-5	Kinicknick	0-5	Pine	27										
220	290	60m	7	S	3	Crest	Alder	10-25	Willow	5-10	Juniper	0-5	Crowberry	5-10	Kinicknick	5-10	Twinflower	0-5	Pine	22										
220	290	60m	8	n/a	n/a	Toe	Juniper	5-10	Willow	0-5			Kinicknick	10-25	Crowberry	5-10	Twinflower	0-5	Pine	16		Spruce	1							

220	290	60m	9	S	n/a	Toe	Juniper	5-10	Soapberry	0-5			Kinicknick	5-10	Twinflower	0-5	Bunchberry	0-5	Pine	13										
220	290	60m	10	n/a	n/a	Level	Alder	0-5	Soapberry	0-5			Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Pine	23										
220	200	25m (from stn 6)	11	S	10	Toe	Juniper	5-10	Soapberry	0-5	Willow	0-5	Kinicknick	5-10	Twinflower	0-5	Crowberry	0-5	Pine	22										
220	200	25m	12	S	5	Upperslope	Alder	>25					Bunchberry	10-25	Milifolia	0-5	Crowberry	0-5	Pine	23		Spruce	3							
233	270		1	S	10	Toe	Salix spp.	10-25	Juniper	0-5	Soapberry	0-5	Crowberry	10-25	Kinicknick	5-10	Bunchberry	5-10	Pine	15		Spruce	1							
233	270	155m	2	S	25	Lower Slope	Willow	5-10	Juniper	0-5			Kinicknick	5-10	Bunchberry	0-5	Twinflower	0-5	Pine	16										
233	270	155m	3	S	5	Upperslope	Juniper	5-10	Willow	0-5			Kinicknick	0-5	Crowberry	0-5	Blueberry	0-5	Pine	11										
233	270	155m	4	W	15	Upperslope	Willow	5-10	Juniper	0-5			Milifolia	10-25	Bunchberry	5-10	Fireweed	0-5	Pine	27		Spruce	1							
233	270	155m	5	W	5	Lower Slope	Willow	0-5					Milifolia	5-10	Crowberry	5-10	Kinicknick	0-5	Pine	23		Spruce	2							
233	270	155m	6	S	5	Toe	Soapberry	0-5					Crowberry	>25	Milifolia	10-25	Labrador Tea	5-10	Pine	20		Spruce	1							
233	270	155m	7	n/a	n/a	Level	Labrador Tea	5-10	Juniper	0-5			Crowberry	5-10	Milifolia	5-10	Bunchberry	0-5	Pine	15		Spruce	4							
233	270	155m	8	S	2	Lower Slope	Juniper	5-10	Soapberry	0-5	Willow	0-5	Crowberry	10-25	Kinicknick	5-10	Bunchberry	5-10	Pine	11		Spruce	3							
233	270	155m	9	E	10	Upperslope	Juniper	5-10					Kinicknick	10-25					Pine	8		Spruce	1							
233	270	155m	10	N	30	Upperslope	Soapberry	10-25	Juniper	5-10	Rose	0-5	Kinicknick	10-25	Twinflower	5-10			Pine	17										
233	270	155m	11	S	15	midslope	Soapberry	5-10	Juniper	0-5			Crowberry	10-25	Kinicknick	5-10	Rose	0-5	Pine	20		Spruce	1							
233	180	155m (from mid point)	12	S	5	Crest	Juniper	0-5					Kinicknick	5-10					Pine	21										
238	50	35m	1	S	13	midslope	Soapberry	10-25	Labrador Tea	5-10			Kinicknick	5-10	Crowberry	5-10	Twinflower	0-5	Pine	25										
238	50	35m	2	S	10	Upperslope	Soapberry	10-25	Labrador Tea	0-5	Juniper	0-5	Crowberry	>25	Kinicknick	5-10	Twinflower	0-5	Pine	20										
238	190	35m	3	W	5	Upperslope	Soapberry	5-10	Labrador Tea	5-10	Willow	0-5	Crowberry	>25	Kinicknick	10-25	Twinflower	5-10	Pine	16										

238	190	35m	4	W	15	Upperslope	Soapberry	10-25	Willow	0-5	Juniper	0-5	Crowberry	10-25	Kinicknick	5-10	Twinflower	0-5	Pine	15		Spruce	1							
238	190	35m	5	S	7	Crest	Mtn Alder	0-5	Soapberry	0-5	Willow	5-10	Crowberry	5-10	Bunchberry	5-10	Kinicknick	0-5	Pine	24		Spruce	1							
238	190	35m	6	S	5	Upperslope	Soapberry	5-10	Willow	0-5			Kinicknick	10-25	Crowberry	10-25			Pine	10										
238	190	35m	7	n/a	n/a	Crest	Soapberry	5-10	Juniper	0-5	Rose	0-5	Kinicknick	10-25	Crowberry	10-25			Pine	11										
238	190	35m	8	n/a	n/a	Level	Soapberry	10-25	Willow	0-5	Rose	0-5	Kinicknick	10-25	Crowberry	10-25	Twinflower	0-5	Pine	18										
238	280	50m (from mid point)	9	S	22	Lower Slope	Soapberry	10-25	Willow	0-5			Crowberry	>25	Kinicknick	10-25	Bunchberry	0-5	Pine	10		Spruce	1							
238	100	50m (from mid point)	10	S	16	midslope	Soapberry	5-10	Willow	0-5			Kinicknick	10-25	Crowberry	5-10	Bunchberry	0-5	Pine	14										
240	140	25m	1	W	2	Toe	Soapberry	0-5	Rose	0-5			Kinicknick	5-10	Twinflower	0-5	Blueberry	0-5	Pine	15	5									
240	140	45m	2	W	4	Lower Slope	Soapberry	0-5	Rose	0-5			Kinicknick	5-10	Twinflower	0-5	Blueberry	0-5	Pine	15	9									
240			3	W	4	Depression	Soapberry	5-10	Willow	0-5	Rose	0-5	Twinflower	5-10	Kinicknick	0-5	Strawberry	0-5	Pine	20	9									
240	140	45m	4	n/a	n/a	Level	Willow	5-10	Soapberry	0-5	Rose	0-5	Kinicknick	5-10	Twinflower	0-5	Bunchberry	0-5	Pine	10										
240	140	45m	5	SW	2	Lower Slope	Soapberry	5-10	Rose	0-5	Juniper	0-5	Kinicknick	>25	Crowberry	0-5	Blueberry	0-5	Pine	15										
240	140	45m	6	SW	1	midslope	Soapberry	5-10					Kinicknick	10-25	Twinflower	0-5	Blueberry	0-5	Pine	18	8									
240	140	45m	7	SW	4	midslope	Soapberry	5-10					Kinicknick	>25	Twinflower	0-5	Crowberry	0-5	Pine	7	4									
240	140	45m	8	SW	9	Upperslope	Soapberry	5-10	Willow	0-5	Juniper	0-5	Twinflower	5-10	Kinicknick	0-5	Crowberry	0-5	Pine	21	11									
240	140	45m	9	W	7	Depression	Willow	>25	Black Twinberry	10-25	Rose	5-10	False Dogbane	>25	Bunchberry	10-25	Strawberry	0-5	Pine	3										
240	140	45m	10	W	4	Depression	Soapberry	5-10	Juniper	0-5	Willow	0-5	Kinicknick	10-25	Twinflower	0-5	Bunchberry	0-5	Pine	5										
240	140	45m	11	n/a	5	Depression	Juniper	5-10	Rose	0-5	Soapberry	0-5	Twinflower	5-10	Kinicknick	0-5	Bunchberry	0-5	Pine	10										
240	140	45m	12	W	8	Depression	Willow	10-25	Birch Leaf	0-5	Rose	0-5	Twinflower	10-25	Bunchberry	5-10	Strawberry	0-5	Pine	8										
259	170	25m	1	S	9	midslope	Labrador Tea	5-10	Juniper	5-10			Crowberry	10-25	Kinicknick	5-10	Fireweed	5-10	Pine	18										

259	170	25m	2	S	6	midslope	Willow	10-25	Juniper	5-10	Labrador Tea	5-10	Crowberry	>25	Kinicknick	10-25	Bunchberry	5-10	Pine	25										
259	170	25m	3	S	11	Upperslope	Soapberry	5-10	Labrador Tea	5-10			Kinicknick	5-10	Crowberry	5-10	Bunchberry	5-10	Pine	27										
259	170	25m	4	S	11	Upperslope	Soapberry	10-25	Labrador Tea	5-10	Juniper	5-10	Crowberry	10-25	Kinicknick	5-10	Bunchberry	0-5	Pine	11										
259	170	25m	5	S	9	midslope	Labrador Tea	10-25	Soapberry	5-10	Willow	0-5	Crowberry	10-25	Bunchberry	5-10	Twinflower	0-5	Pine	27										
259	170	25m	6	S	9	Crest	Soapberry	10-25	Labrador Tea	5-10	Juniper	0-5	Crowberry	10-25	Kinicknick	10-25	Twinflower	5-10	Pine	15										
259	170	25m	7	W	12	Upperslope	Juniper	5-10	Labrador Tea	5-10	Soapberry	5-10	Crowberry	10-25	Bunchberry	5-10	Kinicknick	5-10	Pine	21		Spruce	2							
259	170	25m	8	W	15	Upperslope	Labrador Tea	10-25	Juniper	5-10	Soapberry	0-5	Kinicknick	10-25	Crowberry	5-10	Bunchberry	0-5	Pine	11										
259	170	25m	9	W	8	Upperslope	Juniper	0-5	Rose	5-10			Kinicknick	10-25	Crowberry	10-25	Toadflax	0-5	Pine	13										
259	80	25m	10	S	9	Upperslope	Labrador Tea	10-25	Willow	5-10	Soapberry	0-5	Crowberry	10-25	Bunchberry	5-10	Kinicknick	0-5	Pine	19										
259	268	25m	11	S	17	midslope	Soapberry	10-25	Labrador Tea	10-25			Crowberry	10-25	Bunchberry	5-10	Fireweed	5-10	Pine	17										
316	170	45m (from POC)	1	SW	6	Depression	Willow	>25	Juniper	0-5			Crowberry	5-10	Bunchberry	0-5	Fireweed	0-5	Pine	8										
316	170	85m	2	SE	9	Upperslope	Juniper	5-10	Soapberry	0-5	Rose	0-5	Kinicknick	10-25	Twinflower	0-5	Bunchberry	0-5	Pine	8										
316	170	85m	3	n/a	n/a	Depression	Black Twinberry	5-10	Juniper	0-5	Rose	0-5	Bunchberry	5-10	Twinflower	0-5	Strawberry	0-5	Alder	10		Spruce	3		Pine	1				
316	170	85m	4	n/a	n/a	Depression	Soapberry	5-10	Willow	0-5	Juniper	0-5	Bunchberry	10-25	Twinflower	5-10	Crowberry	0-5	Pine	20	4									
316	170	85m	5	E	3	Toe	Soapberry	5-10	Juniper	0-5	Rose	0-5	Twinflower	5-10	Kinicknick	0-5	Bunchberry	0-5	Pine	15	4									
316	170	85m	6	E	2	Toe	Soapberry	5-10	Willow	0-5	Alder	0-5	Twinflower	5-10	Kinicknick	0-5	Strawberry	0-5	Pine	11	2									
316	170	85m	7	n/a	n/a	Level	Juniper	5-10	Willow	0-5	Soapberry	0-5	Kinicknick	10-25	Twinflower	5-10	Bunchberry	0-5	Pine	24	5									
316	80	85m	8	W	7	Lower Slope	Soapberry	5-10	Juniper	0-5	Rose	0-5	Twinflower	0-5	Bunchberry	0-5	Fireweed	0-5	Pine	17	9									
316	80	85m	9	SW	30	Upperslope	Rose	5-10	Soapberry	0-5	Juniper	0-5	Kinicknick	0-5	Twinflower	0-5	Bunchberry	0-5	Pine	6										
316	80	85m	10	SW	6	Upperslope	Soapberry	0-5					Kinicknick	>25					Pine	15	10									
316	80	85m	11	n/a	n/a	Depression	Soapberry	5-10	Black Twinberry	0-5			Crowberry	5-10	Blueberry	5-10	Twinflower	0-5	Pine	16										

316	260	85m	12	n/a	n/a	Depression	Juniper	5-10	Willow	0-5			Kinicknick	>25	Twinflower	0-5	Fireweed	0-5	Pine	22									
316	260	85m	13	n/a	n/a	Depression	Juniper	5-10	Soapberry	0-5	Willow	0-5	Kinicknick	>25	Crowberry	5-10	Bunchberry	0-5	Pine	14	1								
320	189	25m (from POC)	1	n/a	n/a	Level	Juniper	0-5	Soapberry	0-5			Kinicknick	>25	Fireweed	0-5			Pine	6									
320	189	50m	2	n/a	n/a	Level	Soapberry	0-5	Juniper	0-5			Kinicknick	>25	Fireweed	0-5			Pine	10									
320	189	50m	3	n/a	n/a	Level	Juniper	0-5					Kinicknick	>25					Pine	10									
320	189	50m	4	n/a	n/a	Level	Juniper	0-5					Kinicknick	>25	Fireweed	0-5			Pine	10	2								
320	189	50m	5	n/a	n/a	Level	Juniper	0-5	Rose	0-5			Kinicknick	>25					Pine	10									
320	189	50m	6	n/a	n/a	Level	Soapberry	0-5	Juniper	0-5			Kinicknick	>25					Pine	12	6								
320	289	50m	7	n/a	n/a	Level	Soapberry	0-5	Rose	0-5			Kinicknick	>25					Pine	14									
320	289	50m	8	n/a	n/a	Level	Soapberry	0-5	Juniper	0-5	Rose	0-5	Kinicknick	10-25	Blueberry	0-5			Pine	11	6								
320	289	50m	9	n/a	n/a	Level	Soapberry	0-5	Juniper	0-5	Rose	0-5	Kinicknick	>25					?										
320	289	50m	10	n/a	n/a	Level	Juniper	0-5	Soapberry	0-5	Rose	0-5	Kinicknick	>25	Strawberry	0-5			Pine	7									
320	289	50m	11	NE	25	Lower Slope	Juniper	5-10	Soapberry	5-10			Kinicknick	>25	Twinflower	10-25	Crowberry	5-10	Pine	22	4								
320	289	40m	12	NE	27	Lower Slope	Soapberry	0-5					Bunchberry	0-5	Twinflower	0-5	Fireweed	0-5	Pine	13									
344	360	50m	1	E	20	Lower Slope	Soapberry	0-5					Kinicknick	10-25	Twinflower	0-5	Fireweed	0-5	Pine	9		Spruce	4						
344	360	100m	2	NE	8	Upperslope	Soapberry	5-10	Rose	0-5			Kinicknick	10-25	Twinflower	0-5	Blueberry	0-5	Pine	20		Spruce	3						
344	360	100m	3	n/a	n/a	Depression	Juniper	0-5	Soapberry	0-5			Crowberry	10-25	Twinflower	5-10	Toadflax	0-5	Pine	9		Spruce	9						
344	360	100m	4	n/a	n/a	Level	Soapberry	0-5					Kinicknick	10-25	Blueberry	0-5			Pine	14									
344	360	100m	5	N	11	Upperslope	Soapberry	0-5					Crowberry	5-10	Kinicknick	0-5			Pine	22		Spruce	1						
344	360	100m	6	N	2	Crest	Soapberry	0-5	Rose	0-5			Kinicknick	10-25	Twinflower	5-10	Fireweed	0-5	Pine	23		Spruce	5						
344	360	100m	7	N	9	Upperslope	Soapberry	5-10	Juniper	0-5	Rose	0-5	Bunchberry	0-5	Twinflower	0-5	Crowberry	0-5	Pine	16		Spruce	6						
344	360	100m	8	n/a	n/a	Depression	Black Twinberry	10-25	Alder	5-10	Gooseberry	0-5	Horsetail	>25	B. Fern	5-10	Fireweed	5-10	Spruce	4									
344	360	100m	9	N	4	Upperslope	Soapberry	0-5					Crowberry	>25	Twinflower	5-10	Bunchberry	0-5	Pine	6		spruce	2						
344	90	100m (from midpoint)	10	E	2	Lower Slope	Soapberry	0-5	Juniper	0-5			Kinicknick	10-25					Pine	20									
344	90	100m	11	E	5	Upperslope	Soapberry	5-10	Willow	0-5			Kinicknick	5-10					Pine	15									

344	90	100m	12	n/a	n/a	Level	Juniper	5-10	Willow	0-5	Black Twinberry	0-5	Bunchberry	10-25	Twinflower	5-10	Crowberry	0-5	Spruce	9		Pine	5							
355	180		1	S	6	Lower Slope	Soapberry	10-25	Willow	0-5			Bunchberry	5-10	Fireweed	5-10	Kinicknick	0-5	Pine	15										
355	180	65m	2	N	15	Crest	Soapberry	10-25	Juniper	5-10	Rose	0-5	Kinicknick	10-25	Twinflower	0-5			Pine	22	5									
355	180	65m	3	n/a	n/a	Depression	Willow	10-25	Betula	5-10			Bunchberry	5-10					Pine	4										
355	180	65m	4	E	9	Crest	Soapberry	10-25	Rose	0-5			Kinicknick	0-5	Fireweed	0-5	Twinflower	0-5	Pine	22	8						2	20m	90	POC
355	180	65m	5	E	6	Crest	Soapberry	10-25	Rose	0-5			Kinicknick	5-10	Twinflower	0-5			Pine	26	15						2	20m	270	Stn3
355	180	65m	6	W	19	Upperslope	Soapberry	10-25	Rose	0-5			Fireweed	0-5	Twinflower	0-5	Bunchberry	0-5	Pine	22	13						1	0m	270	stn12
355	180	65M	7	E	5	Crest	Soapberry	10-25	Rose	0-5			Kinicknick	5-10	Bunchberry	0-5	Twinflower	0-5	Pine	17	12									
355	180	65m	8	n/a	n/a	Crest	Soapberry	10-25	Juniper	0-5	Rose	0-5	Kinicknick	10-25					Pine	12	9									
355	180	65m	9	E	50	midslope	Soapberry	10-25	Labrador Tea	0-5			Bunchberry	5-10	Kinicknick	5-10	Twinflower	0-5	Pine	19	3									
355	270	65m	10	E	21	Upperslope	Soapberry	10-25	Rose	0-5			Kinicknick	10-25	Bunchberry	5-10	Twinflower	0-5	Pine	27	10									
355	270	65m	11	E	12	Upperslope	Soapberry	5-10	Rose	0-5			Kinicknick	5-10	Twinflower	0-5			Pine	25	16									
355	90	65m (from Midpoint)	12	n/a	n/a	Level	Soapberry	5-10					Kinicknick	5-10	Twinflower	0-5	Fireweed	0-5	Pine	23	13									
413	170	25m	1	E	16	Upperslope	Willow	0-5	Juniper	0-5			Crowberry	>25	Clubmoss	5-10	Bunchberry	0-5	Pine	25		Spruce	3							
413	170	50m	2	E	14	Upperslope	Willow	0-5	Juniper	0-5			Crowberry	5-10	Clubmoss	0-5	Bunchberry	0-5	Pine	15		Balsm	2							
413	170	50m	3	E	6	Upperslope	Willow	0-5	Juniper	0-5			Crowberry	>25	Twinflower	10-25	Bunchberry	5-10	Pine	27		Balsm	1							
413	170	50m	4	E	9	Upperslope	Willow	0-5	Juniper	0-5			Crowberry	>25	Twinflower	5-10	Bunchberry	0-5	Pine	21		Spruce		1	Balsm	1				
413	170	50m	5	E	11	Upperslope	Willow	10-25	Labrador Tea	0-5			Crowberry	10-25	Blueberry	5-10	Wintergreen	0-5	Pine	11		Balsm	6							
413	170	50m	6	E	11	Upperslope	Willow	5-10					Crowberry	10-25	Bunchberry	5-10	Twinflower	0-5	Pine	16	3									
413	170	50m	7	E	9	Upperslope	Willow	10-25					Crowberry	>25	Blueberry	5-10	Bunchberry	0-5	Pine	22		Balsm	2	1						
413	170	50m	8	E	13	Upperslope	Willow	>25					Crowberry	>25	Blueberry	0-5	Lupine	0-5	Pine	17		Balsm	1							

413	170	40m	9	E	9	Upperslope	Willow	0-5	Juniper	0-5			Crowberry	10-25	Lupine	5-10	Blueberry	0-5	Pine	19		Spruce	1		Balsm	1				
413	170	50m	10	E	12	Upperslope	Willow	0-5	Labrador Tea	0-5			Crowberry	5-10	Lupine	0-5	Fireweed	0-5	Pine	15		Balsm	1							
413	170	50m	11	E	13	Upperslope	Willow	0-5					Crowberry	>25	Blueberry	5-10	Lupine	0-5	Pine	12		Spruce	1							
413	170	50m	12	E	9	Upperslope	Willow	5-10					Crowberry	>25	Blueberry	5-10	Twinflower	0-5	Pine	23		Spruce	1							
420	185	25m	1	n/a	7	Depression	Soapberry	5-10	Rose	0-5			Twinflower	10-25	Bunchberry	5-10	Kinicknick	0-5	Pine	16		Spruce	3							
420	185	55m	2	E	4	Crest	Juniper	5-10	Soapberry	5-10	Rose	0-5	Kinicknick	>25	Twinflower	10-25	Crowberry	0-5	Pine	22	13									
420	185	55m	3	SW	6	Lower Slope	Soapberry	10-25	Juniper	5-10	Willow	0-5	Kinicknick	>25	Twinflower	10-25	Crowberry	5-10	Pine	24		Spruce	1	2						
420	185	55m	4	E	3	Upperslope	Soapberry	5-10	Juniper	0-5			Toadflax	10-25	Bunchberry	5-10	Crowberry	0-5	Pine	16		Spruce	3	1						
420	185	55m	5	S	12	Upperslope	Soapberry	10-25	Rose	0-5			Kinicknick	>25	Bunchberry	0-5	Crowberry	0-5	Pine	15										
420	185	55m	6	W	7	Lower Slope	Soapberry	10-25	Juniper	0-5			Crowberry	>25	Kinicknick	10-25	Toadflax	0-5	Pine	29		Spruce	7	3						
420	185	55m	7	E	4	midslope	Soapberry	10-25	Juniper	5-10			Kinicknick	>25	Twinflower	10-25	Bunchberry	0-5	Pine	25	7									
420	185	55m	8	E	6	Lower Slope	Juniper	10-25	Soapberry	5-10	Willow	0-5	Crowberry	>25	Blueberry	0-5	Kinicknick	0-5	Pine	28		Spruce	2							
420	185	55m	9	W	5	Lower Slope	Willow	10-25	Labrador Tea	5-10	Black Twinberry	0-5	Crowberry	>25	Bunchberry	5-10	Twinflower	0-5	Pine	24		Spruce	1							
420	185	55m	10	N	8	Upperslope	Soapberry	10-25	Juniper	0-5	Rose	0-5	Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Pine	31	27									
420	185	55m	11	n/a	n/a	Level	Willow	>25	Birch Leaf	10-25	Black Twinberry	5-10	Horsetail	10-25	Bunchberry	5-10	Toadflax	5-10	Spruce	9		Pine	1		Poplar	1				
420	275	55m (from stn 5)	12	SE	8	Lower Slope	Soapberry	10-25	Birch Leaf	5-10	Juniper	0-5	Crowberry	10-25	Kinicknick	5-10	Bunchberry	0-5	Pine	9		Spruce	4							
455	180	20m	1	E	11	Lower Slope	Willow	10-25	Juniper	5-10			Crowberry	10-25	Bunchberry	5-10	Twinflower	0-5	Pine	25	8	Spruce	1							
455	180	50m	2	E	10	Upperslope	Willow	10-25					Crowberry	10-25	Blueberry	0-5	Twinflower	0-5	Pine	14										
455	180	50m	3	E	11	Upperslope	Willow	5-10					Crowberry	>25	ground cedar	5-10	Blueberry	0-5	Pine	18		Spruce	1	3						

455	180	50m	4	E	9	Upperslope	Willow	0-5	Juniper	0-5			Crowberry	>25	Blueberry	5-10	ground cedar	0-5	Pine	11		Spruce	1							
455	180	50m	5	E	1	Upperslope	Labrador Tea	5-10	Willow	0-5			Crowberry	>25	Blueberry	5-10	Twinflower	0-5	Pine	23		Spruce	2	1						
455	180	50m	6	E	12	Upperslope	Willow	0-5					Crowberry	10-25	Kinicknick	0-5	Blueberry	0-5	Pine	18										
455	180	50m	7	E	7	Upperslope	Willow	0-5					Crowberry	0-5	Blueberry	0-5	Bunchberry	0-5	Pine	19										
455	180	50m	8	E	11	Upperslope	Willow	0-5					Crowberry	5-10	Blueberry	0-5	Twinflower	0-5	Pine	12										
455	180	50m	9	E	9	Upperslope	Willow	5-10					Crowberry	>25	Blueberry	0-5			Pine	17										
455	180	50m	10	E	10	Upperslope	Willow	5-10	Labrador Tea	0-5			Crowberry	>25	Bunchberry	5-10	Twinflower	0-5	Pine	25	4	Balsm	1							
455	270	50m (from stn 5)	11	E	13	Upperslope	Willow	5-10	Juniper	0-5			Crowberry	>25	Bunchberry	5-10	Blueberry	0-5	Pine	18	1	Spruce	2	1						
455	90	50m	12	E	2	Upperslope	Willow	0-5					Crowberry	>25	Blueberry	5-10	Kinicknick	0-5	Pine	10		Spruce	1							
544	173	10m	1	S	6	midslope	Juniper	10-25	Soapberry	5-10			Kinicknick	10-25	Twinflower	0-5	Bunchberry	0-5	Pine	6		Spruce	3							
544	173	15m	2	S	2	Lower Slope	Juniper	5-10	Soapberry	0-5	Willow	0-5	Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Pine	5	4									
544	173	15m	3	E	9	Upperslope	Juniper	>25	Soapberry	0-5			Kinicknick	10-25	Twinflower	0-5			Pine	7	5	Spruce	1							
544	173	15m	4	E	6	Upperslope	Juniper	5-10	Soapberry	0-5	Rose	0-5	Kinicknick	10-25	Twinflower	0-5			Pine	6										
544	173	15m	5	E	13	Upperslope	Juniper	10-25	Soapberry	0-5			Kinicknick	10-25	Twinflower	0-5	Wintergreen	0-5	Pine	5										
544	173	15m	6	W	9	Upperslope	Juniper	5-10	Soapberry	0-5	Rose	0-5	Crowberry	>25	Kinicknick	10-25	Twinflower	5-10	Pine	8		Spruce	1							
544	173	15m	7	W	11	Upperslope	Juniper	0-5	Soapberry	0-5	Rose	0-5	Kinicknick	10-25	Strawberry	0-5			Pine	6	1									
544	93(stn 5)	15m	8	SW	39	midslope	Juniper	5-10	Soapberry	0-5	Rose	0-5	Kinicknick	10-25	Strawberry	0-5			Pine	7										
544	93	15m	9	W	8	Lower Slope	Juniper	5-10	Soapberry	0-5	Willow	0-5	Kinicknick	>25	Twinflower	5-10	Strawberry	0-5	Pine	5										
544	93	15m	10	n/a	n/a	Crest	Juniper	5-10	Soapberry	0-5	Rose	0-5	Kinicknick	>25	Twinflower	5-10			Pine	6	2									
544	93	15m	11	n/a	n/a	Crest	Soapberry	0-5	Juniper	0-5			Kinicknick	>25	Twinflower	5-10	Strawberry	0-5	Pine	7	2									
544	93	15m	12	n/a	n/a	Level	Soapberry	5-10	Juniper	0-5			Kinicknick	>25	Twinflower	5-10	Strawberry	0-5	Pine	11	2									

563	170	10m	1	W	10	Upperslope	Willow	10-25					Blueberries	5-10	Kinicknick	0-5			Pine	26										
563	170	35m	2	W	25	Lower Slope	Willow	10-25	Juniper	0-5			Blueberries	10-25	Twinflower	5-10	Bunchberry	0-5	Pine	18										
563	170	35m	3	n/a	n/a	Level	Willow	0-5					Blueberries	5-10	Kinicknick	5-10	Lupine	0-5	Pine	12										
563	170	35m	4	W	8	Upperslope	Willow	10-25					Blueberries	10-25	Lupine	0-5			Pine	11										
563	170	35m	5	W	11	Upperslope	Soapberry	>25	Willow	5-10			Crowberry	5-10	Blueberry	5-10	Bunchberry	0-5	Pine	20										
563	170	35m	6	W	10	Upperslope	Willow	>25					Blueberries	10-25	Crowberry	5-10	Bunchberry	0-5	Pine	16	2									
563	170	35m	7	N	7	Crest	Willow	5-10					Blueberries	10-25	Kinicknick	5-10	Crowberry	0-5	Pine	13										
563	170	35m	8	N	9	Upperslope	Willow	5-10	Juniper	0-5			Blueberries	5-10	Crowberry	0-5	Lupine	0-5	Pine	24										
563	170	35m	9	W	16	Depression	Willow	>25	Alder	10-25			Twinflower	5-10	Bunchberry	5-10	Milifolia	0-5	Pine	15		Spruce	2							
563	170	35m	10	W	15	midslope	Willow	>25	Soapberry	10-25			Fireweed	10-25	Milifolia	10-25	Bunchberry	5-10	Pine	17										
563	80	35m	11	W	21	midslope	Soapberry	10-25	Willow	10-25			Twinflower	5-10	Blueberry	5-10	Fireweed	0-5	Pine	24										
563	80	35m	12	W	20	midslope	Willow	0-5					Blueberries	10-25	Kinicknick	10-25			Pine	10										
590	131	70m	1	N	15	midslope	Soapberry	5-10	Juniper	0-5			Kinicknick	10-25	Crowberry	5-10	Twinflower	0-5	Pine	18	2									
590	131	140m	2	N	14	Lower Slope	Willow	10-25	Labrador Tea	5-10	Soapberry	5-10	Crowberry	>25	Kinicknick	5-10	Bunchberry	5-10	Pine	13										
590	131	140m	3	N	10	Upperslope	Soapberry	5-10	Black Twinberry	0-5	Juniper	0-5	Crowberry	>25	Kinicknick	10-25	Blueberry	5-10	Pine	21	2									
590	131	140m	4	S	45	Upperslope	Willow	5-10	Soapberry	0-5			Twinflower	10-25	Kinicknick	5-10	Blueberry	0-5	Pine	22										
590	131	140m	5	SE	10	midslope	Willow	5-10	Soapberry	0-5			Crowberry	10-25	Twinflower	5-10	Bunchberry	0-5	Pine	28	4									
590	131	140m	6	N	18	midslope	Soapberry	0-5	Juniper	0-5			Crowberry	10-25	Twinflower	5-10	Bunchberry	5-10	Pine	33	6									
590	131	140m	7	N	10	midslope	Soapberry	5-10	Labrador Tea	0-5			Blueberries	10-25	Twinflower	5-10	Bunchberry	0-5	Pine	25	5									
590	131	140m	8	E	16	Lower Slope	Willow	5-10	Soapberry	0-5			Clubmoss	5-10	Twinflower	0-5	Crowberry	0-5	Pine	25	3	Spruce	1							

590	221	140m	9	S	1	midslope	Soapberry	5-10	Labrador Tea	0-5			Crowberry	>25	Twinflower	5-10	Bunchberry	0-5	Pine	26	1									
590	221	140m	10	S	14	Upperslope	Soapberry	5-10					Crowberry	>25	Twinflower	5-10	Bunchberry	0-5	Pine	24	1									
590	41	140m	11	S	20	Upperslope	Soapberry	10-25					Crowberry	>25	Twinflower	5-10	Kinicknick	0-5	Pine	30	1									
590	41	140m	12	S	17	Lower Slope	Soapberry	5-10	Labrador Tea	0-5			Crowberry	>25	Twinflower	5-10	Bunchberry	0-5	Pine	28	3	Spruce	2							
637	176	116m	1																											
637	176	95m	2	n/a	n/a	Level	Soapberry	0-5	Juniper	0-5			Kinicknick	10-25	Twinflower	5-10	Bunchberry	0-5	Pine	9	4									
637	176	95m	3	S	3	Toe	Juniper	10-25	Soapberry	0-5	Willow	0-5	Twinflower	10-25	Kinicknick	5-10	Strawberry	0-5	Pine	6		Spruce	1		Poplar	1				
637	176	70m	4	n/a	n/a	Level	Willow	10-25	Soapberry	0-5	Juniper	0-5	Kinicknick	10-25	Twinflower	5-10	Strawberry	0-5	Pine	3		Poplar	6							
637	176	95m	5	n/a	n/a	Crest	Juniper	5-10	Soapberry	0-5			Kinicknick	>25	Strawberry	0-5			Pine	7										
637	176	95m	6	S	5	Lower Slope	Juniper	10-25	Soapberry	5-10			Kinicknick	>25	Fireweed	0-5			Pine	8	3									
637	86	95m	7	W	6	Lower Slope	Willow	5-10	Soapberry	0-5	Juniper	0-5	Kinicknick	10-25	Twinflower	5-10	Strawberry	0-5	Pine	9		Spruce	1							
637	86	95m	8	n/a	n/a	Level	Willow	5-10	Juniper	0-5			Kinicknick	10-25	Twinflower	5-10	Fireweed	0-5	Pine	6	2	Spruce	1							
637	86	100m	9	n/a	n/a	Crest	Juniper	5-10	Soapberry	5-10			Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Pine	10		Spruce	1							
637	86	95m	10	n/a	n/a	Level	Willow	5-10	Juniper	0-5			Twinflower	10-25	Kinicknick	5-10	Bunchberry	0-5	Pine	5		Spruce	8							
1124	280	10m	1	n/a	n/a	Level	Willow	0-5	Rose	0-5			Bunchberry	0-5	Strawberry	0-5			Pine	12		Spruce	5							
1124	280	25m	2	n/a	n/a	Level	Soapberry	0-5	Willow	0-5			Strawberry	0-5	Bunchberry	0-5	Twinflower	0-5	Pine	20		Spruce	3							
1124	280	25m	3	n/a	n/a	Level	Juniper	5-10	Willow	0-5			Kinicknick	5-10	Twinflower	0-5	Strawberry	0-5	Pine	16		Spruce	3							
1124	280	25m	4	n/a	n/a	Level	Soapberry	>25	Willow	10-25			Kinicknick	10-25	Fireweed	5-10	Twinflower	0-5	Pine	10		Spruce	2		Poplar	2				
1124	280	25m	5	n/a	n/a	Level	Soapberry	10-25	Juniper	5-10	Willow	0-5	Kinicknick	10-25	Crowberry	0-5	Twinflower	0-5	Pine	11		Spruce	2	1						
1124	280	25m	6	n/a	n/a	Level	Soapberry	>25	Juniper	10-25			Kinicknick	>25	Crowberry	0-5	Fireweed	0-5	Pine	14		Spruce	2	2						
1124	280	25m	7	S	4	Crest	Juniper	5-10	Soapberry	0-5			Kinicknick	10-25	Fireweed	0-5	Twinflower	0-5	Pine	7	1									
1124	280	25m	8	n/a	n/a	Level	Soapberry	10-25	Juniper	10-25			Crowberry	5-10	Kinicknick	5-10	Bunchberry	0-5	Pine	7		Spruce	1	1						
1124	280	25m	9	n/a	n/a	Crest	Soapberry	10-25	Juniper	5-10			Kinicknick	10-25	Fireweed	5-10	Crowberry	0-5	Pine	8										
1124	280	25m	10	N	37	Upperslope	Soapberry	10-25	Juniper	0-5			Kinicknick	>25	Crowberry	0-5	Fireweed	0-5	Pine	8										
1124	10	25m	11	n/a	n/a	Level	Juniper	10-25	Willow	5-10	Soapberry	0-5	Crowberry	10-25	Kinicknick	5-10	Bunchberry	5-10	Pine	8		Spruce	3							
1124	10	25m	12	E	25	Toe	Soapberry	10-25	Willow	0-5			Kinicknick	>25	Fireweed	5-10	Twinflower	0-5	Pine	14		Spruce	2							
1124	10	25m	13	n/a	n/a	Level	Willow	0-5	Soapberry	0-5			Kinicknick	5-10	Twinflower	5-10	Fireweed	5-10	Pine	25	2	Spruce	2							
1326	133	30m	1	n/a	n/a	Level	Juniper	5-10	Willow	5-10	Soapberry	0-5	Kinicknick	10-25	Crowberry	5-10	Bunchberry	0-5	Pine	14		Spruce	3	1						
1326	133	30m	2	E	2	Lower Slope	Willow	10-25	Soapberry	5-10	Juniper	0-5	Kinicknick	10-25	Crowberry	5-10	Strawberry	0-5	Pine	12		Spruce	3	2						

1326	133	30m	3	E	2	Lower Slope	Soapberry	10-25	Willow	0-5			Kinicknick	10-25	Crowberry	5-10	Fireweed	0-5	Pine	27	3	Spruce		3						
1326	133	30m	4	E	2	Toe	Willow	10-25	Soapberry	5-10			Crowberry	10-25	Kinicknick	5-10	Bunchberry	0-5	Pine	22		Spruce		3						
1326	133	35m	5	n/a	n/a	Level	Willow	10-25	Soapberry	5-10	Juniper	0-5	Kinicknick	5-10	Crowberry	0-5	Bunchberry	0-5	Pine	12		Spruce	2							
1326	133	35m	6	E	4	Lower Slope	Willow	10-25	Juniper	5-10			Kinicknick	5-10	Crowberry	5-10	Strawberry	0-5	Pine	12		Spruce	4							
1326	133	35m	7	E	5	Lower Slope	Soapberry	10-25	Willow	5-10	Juniper	5-10	Kinicknick	10-25	Crowberry	5-10	Strawberry	5-10	Pine	10	1	Spruce		2						
1326	133	35m	8	E	9	Lower Slope	Juniper	10-25	Soapberry	5-10	Willow	5-10	Kinicknick	10-25	Crowberry	0-5	Strawberry	0-5	Pine	23	7	Spruce		2						
1326	133	35m	9	E	5	Lower Slope	Juniper	10-25	Soapberry	5-10	Willow	5-10	Kinicknick	10-25	Crowberry	0-5	Strawberry	0-5	Pine	15	7	Spruce	3							
1326	133	35m	10	E	20	Lower Slope	Juniper	10-25	Soapberry	10-25	Willow	0-5	Kinicknick	10-25	Crowberry	5-10	Strawberry	0-5	Pine	11										
1326	133	35m	11	E	20	midslope	Soapberry	10-25	Juniper	0-5	Rose	0-5	Kinicknick	10-25	Twinflower	0-5	Bunchberry	0-5	Pine	11		Spruce	1							
1326	133	35m	12	E	15	Upperslope	Soapberry	10-25	Juniper	5-10	Rose	0-5	Kinicknick	10-25	Strawberry	0-5			Pine	11		Spruce	1							
1485	36		1	n/a	n/a	Level	Willow	>25%	Rose	0-5			Twinflower	10-25	Bunchberry	0-5	Fireweed	0-5	Spruce	6		Poplar	1							
1485	36	80m	2	n/a	n/a	Level	Soapberry	10-25	Willow	5-10	Juniper	5-10	Twinflower	5-10	Bunchberry	5-10	Strawberry	0-5	Pine	11		Spruce	3							
1485	36	80m	3	N	3	Lower Slope	Willow	10-25	Juniper	10-25			Fireweed	5-10	Bunchberry	5-10	Kinicknick	0-5	Spruce	7		Pine	1							
1485	36	80m	4	N	18	midslope	Juniper	10-25	Soapberry	5-10	Willow	0-5	Bunchberry	5-10	Strawberry	5-10	Kinicknick	0-5	Spruce	9	2									
1485	36	80m	5	N	12	midslope	Juniper	10-25	Willow	5-10			Kinicknick	5-10	Strawberry	5-10	Twinflower	0-5	Spruce	8	1	Pine	2							
1485	36	80m	6	N	23	midslope	Willow	5-10	Juniper	5-10			Kinicknick	0-5	Bunchberry	0-5	Strawberry	0-5	Pine	12		Spruce	5	1						
1485	36	80m	7	N	13	midslope	Juniper	10-25	Soapberry	10-25			Kinicknick	10-25	Bunchberry	0-5	Twinflower	0-5	Pine	10		Spruce		1						
1485	36	80m	8	n/a	n/a	level	Juniper	10-25	Willow	5-10	Rose	0-5	Twinflower	5-10	Strawberry	5-10	Kinicknick	0-5	Pine	7		Spruce	6							
1485	36	80m	9	n/a	n/a	Level	Willow	5-10	Rose	0-5			Bunchberry	5-10	Strawberry	0-5	Twinflower	0-5	Spruce	14	2	Pine	8							
1485	36	80m	10	n/a	n/a	Level	Willow	10-25	Juniper	5-10	Rose	0-5	Kinicknick	10-25	Strawberry	5-10	Twinflower	0-5	Spruce	11	1									
1485	36	80m	11	n/a	n/a	Level	Willow	10-25	Juniper	5-10			Fireweed	5-10	Bunchberry	5-10	Twinflower	0-5	Spruce	13		Pine	12							
1485	306	from midpoint #6	12	N	13	midslope	Juniper	>25	Soapberry	10-25	Willow	5-10	Kinicknick	5-10	Bunchberry	0-5	Kinicknick	0-5	Pine	20	1	Spruce	4							

1485	126	from midpoint #6	13	N	14	midslope	Juniper	10-25	Willow	5-10	Soapberry	0-5	Kinicknick	5-10	Strawberry	5-10	Twinflower	0-5	Pine	11		Spruce	2							
1551	126	30m	1	SW	16	Upperslope	Soapberry	0-5	Willow	0-5			Kinicknick	5-10	Bunchberry	0-5	Wintergreen	0-5	Pine	21	8						1		360	1
1551	126	60m	2	NW	15	Lower Slope	Black Twinberry	10-25	Labrador Tea	0-5	Gooseberry	0-5	Bunchberry	10-25	Fireweed	5-10	Horsetail	0-5	Pine	4		Spruce	3							
1551	126	60m	3	NE	14	Upperslope	Alder	10-25	Soapberry	0-5			Twinflower	5-10	Wintergreen	5-10	Bunchberry	0-5	Pine	19		Spruce	1							
1551	126	60m	4	E	2	midslope	Soapberry	5-10	Willow	0-5	Alder	0-5	Kinicknick	5-10	Bunchberry	0-5	Twinflower	0-5	Pine	18	3									
1551	126	60m	5	n/a	n/a	Depression	Willow	5-10	Rose	0-5			Twinflower	10-25	Crowberry	5-10	Fireweed	5-10	Pine	13		Spruce		4						
1551	126	60m	6	NE	11	Toe	Soapberry	0-5	Willow	0-5			Crowberry	10-25	Blueberry	10-25	Bunchberry	0-5	Pine	16	3	Spruce	3							
1551	126	70m	7	N	9	Upperslope	Soapberry	5-10	Willow	0-5			Kinicknick	>25	Twinflower	10-25	Bunchberry	0-5	Pine	18										
1551	126	50m	8	n/a	n/a	Crest	Soapberry	5-10	Juniper	0-5			Kinicknick	>25	Twinflower	5-10	Fireweed	0-5	Pine	15										
1551	246	60m (from Stn4)	9	SW	18	Lower Slope	Soapberry	0-5	Juniper	0-5			Crowberry	>25	Twinflower	10-25	Wintergreen	0-5	Pine	30	3									
1551	246	60m	10	SW	8	Upperslope	Alder	0-5	Soapberry	0-5	Juniper	0-5	Twinflower	5-10	Blueberry	0-5	Kinicknick	0-5	Pine	20	1									
1551	46	60m	11	n/a	n/a	Depression	Soapberry	0-5	Juniper	0-5			Crowberry	10-25	Twinflower	5-10	Bunchberry	0-5	Pine	26	2	Spruce	3							
1551	46	40m	12	NE	16	Lower Slope	Soapberry	0-5	Alder	0-5			Crowberry	10-25	Twinflower	5-10	Fireweed	0-5	Pine	22	2	Spruce	1							
1567	240	15m	1	S	9	midslope	Soapberry	0-5	Willow	0-5	Juniper	0-5	Crowberry	>25	Bunchberry	5-10	Blueberry	5-10	Pine	28	6	Spruce	1							
1567	240	30m	2	S	5	Lower Slope	Willow	0-5	Soapberry	0-5			Crowberry	>25	Blueberry	10-25	Bunchberry	5-10	Pine	27	2	Spruce	6	2						
1567	240	30m	3	NE	12	midslope	Willow	0-5					Crowberry	>25	Twinflower	10-25	Blueberry	5-10	Pine	24		Spruce	6							
1567	240	30m	4	SW	6	midslope	Juniper	0-5	Willow	0-5			Crowberry	>25	Kinicknick	5-10	Twinflower	0-5	Pine	26	8									
1567	240	30m	5	n/a	n/a	Level	Willow	10-25	Labrador Tea	5-10			Crowberry	>25	Blueberry	5-10	Birch Leaf	5-10	Pine	12		Spruce	3							
1567	240	30m	6	n/a	n/a	Level	Willow	10-25	Labrador Tea	0-5			Crowberry	>25	Blueberry	5-10	Birch Leaf	0-5	Pine	6		Spruce	3							
1567	240	30m	7	NE	2	midslope	Willow	5-10					Crowberry	10-25	Twinflower	5-10	Blueberry	0-5	Pine	22		Spruce	7							

1567	240	30m	8	NE	3	midslope	Willow	5-10					Crowberry	>25	Twinflower	5-10	Blueberry	5-10	Pine	22		Spruce	3							
1567	240	30m	9	NE	1	Upperslope	Soapberry	0-5					Crowberry	>25	Blueberry	5-10	Fireweed	0-5	Pine	25	6	Spruce	2	1						
1567	330	30m	10	N	4	Upperslope	Soapberry	0-5					Crowberry	>25	Twinflower	5-10	Fireweed	0-5	Pine	24		Spruce	1							
1567	330	30m	11	n/a	n/a	Depression	Willow	5-10	Soapberry	0-5			Crowberry	>25	Twinflower	10-25	Bunchberry	0-5	Pine	18		Spruce	1							
1567	150	30m	12	SE	8	Lower Slope	Soapberry	0-5	Willow	0-5	Juniper	0-5	Crowberry	>25	Twinflower	10-25	Blueberry	0-5	Pine	24		Spruce	6							
1567	150	30m	13	n/a	n/a	Level	Willow	5-10					Crowberry	5-10	Blueberry	0-5	Bunchberry	0-5	Pine	11	1	Spruce	10							
1632	0	20m	1	W	16	midslope	Soapberry	0-5	Juniper	0-5	Rose	0-5	Kinicknick	>25					Pine	12		Spruce	1				5	10m	90	1
1632	0	45m	2	W	8	Upperslope	Soapberry	0-5					Kinicknick	10-25	Fireweed	0-5	Bunchberry	0-5	Pine	21							1	5m	90	2
1632	0	45m	3	S	15	Upperslope	Soapberry	0-5	Juniper	0-5	Rose	0-5	Kinicknick	>25					Pine	10		Spruce	1				1	3m	90	4
1632	0	45m	4	N	1	Crest	Soapberry	0-5					Kinicknick	5-10					Pine	18	6						3	5m	90	4
1632	0	45m	5	N	20	Lower Slope	Soapberry	5-10					Twinflower	10-25	Crowberry	5-10	Toadflax	0-5	Pine	26		Spruce		3			4	25m	270	4
1632	0	45m	6	N	11	Lower Slope	Soapberry	5-10	Juniper	0-5	Rose	0-5	Crowberry	10-25	Kinicknick	5-10	Twinflower	5-10	Pine	25		Spruce	4							
1632	0	45m	7	N	8	Toe	Willow	5-10	Juniper	0-5			Twinflower	5-10	Bunchberry	0-5	Crowberry	0-5	Spruce	11	2	Pine	6							
1632	0	55m	8	n/a	n/a	Level	Willow	>25	Juniper	0-5			Crowberry	>25	Twinflower	0-5	Bunchberry	0-5	Spruce	10		Pine	2							
1632	0	35m	9	n/a	n/a	Level	Soapberry	5-10	Juniper	0-5			Crowberry	>25	Twinflower	0-5	Fireweed	0-5	Pine	14		Spruce		9						
1632	0	30m	10	N	1	Lower Slope	Soapberry	0-5	Willow	0-5			Crowberry	>25	Twinflower	5-10	Bunchberry	0-5	Pine	9		Spruce	7							
1632	90	11m (from stn 4)	11	N	8	Crest	Soapberry	0-5					Kinicknick	0-5					Pine	10	7									
1632	90	25m (from stn 4)	12	N	2	Crest	Soapberry	0-5	Rose	0-5	Birch	0-5	Kinicknick	0-5					Pine	28										
1648	259	50m	1	S	11	midslope	Soapberry	0-5					Kinicknick	5-10					Pine	19	2									
1648	259	100m	2	NE	3	Toe	Willow	5-10	Rose	0-5			Twinflower	5-10	Bunchberry	0-5	Birch Leaf	0-5	Pine	20	3	spruce	4							
1648	259	100m	3	NE	18	midslope	Soapberry	0-5					Twinflower	5-10	Crowberry	0-5	Bunchberry	0-5	Pine	16	1	spruce	1							
1648	259	100m	4	N	11	Upperslope	Willow	5-10					Kinicknick	5-10	Twinflower	0-5	Crowberry	0-5	Pine	24	3	Spruce	1							

1648	259	100m	5	N	25	Upperslope	Soapberry	10-25	Willow	0-5			Twinflower	5-10	Crowberry	0-5	Bunchberry	0-5	Pine	16	1	Spruce	6	3						
1648	259	100m	6	E	12	midslope	Soapberry	0-5	Juniper	0-5			Kinicknick	10-25					Pine	16										
1648	259	100m	7	S	8	Lower Slope	Soapberry	5-10	Juniper	0-5			Kinicknick	10-25	Twinflower	5-10	Crowberry	0-5	Pine	21	4	Spruce	2							
1648	259	100m	8	S	11	Lower Slope	Soapberry	5-10	Rose	0-5			Twinflower	10-25	Kinicknick	5-10	Blueberry	0-5	Pine	12	6									
1648	259	100m	9	E	26	Lower Slope	Mtn Alder	5-10					Bunchberry	5-10	Wintergreen	0-5	Twinflower	0-5	Pine	21	1	Spruce	12	4						
1648	259	100m	10	E	16	Lower Slope	Soapberry	5-10	Gooseberry	0-5			Crowberry	5-10	Bunchberry	0-5	Twinflower	0-5	Pine	9		Spruce	11	1						
1648	259	100m	11	E	5	Lower Slope	Mtn Alder	>25	Willow	0-5			Wintergreen	5-10	Blueberry	0-5			Pine	28		Spruce		1						
1648	350	100m	12	S	30	Upperslope	Juniper	10-25	Soapberry	5-10			Kinicknick	10-25	Blueberry	0-5	Bunchberry	0-5	Pine	14		Spruce	1							
1648	169	100m	13	NW	9	midslope	Soapberry	0-5					Crowberry	>25	Blueberry	0-5			Pine	19										
1691	170	10m	1	n/a	n/a	Level	Willow	0-5					Twinflower	5-10	Wintergreen	0-5	Bunchberry	0-5	Spruce	8	5	Pine	1							
1691	170	20m	2	n/a	n/a	Level	Willow	5-10	Labrador Tea	0-5			Crowberry	>25	Fireweed	0-5	Bunchberry	0-5	Spruce	11	7									
1691	170	20m	3	NW	9	Lower Slope	Willow	0-5					Crowberry	5-10	Blueberry	0-5	Bunchberry	0-5	Spruce	17	7									
1691	170	20m	4	NW	3	midslope	Willow	0-5					Crowberry	5-10	Blueberry	0-5	Twinflower	0-5	Spruce	8		Pine	4	4						
1691	170	20m	5	NW	1	Crest	Rose	0-5					Fireweed	0-5	Blueberry	0-5	Twinflower	0-5	Pine	12	2	Spruce	1	2						
1691	170	20m	6	NW	5	Crest	Willow	0-5					Blueberries	5-10	Crowberry	0-5			Pine	17		Spruce	5							
1691	170	20m	7	NW	8	Crest	Willow	0-5					Crowberry	5-10	Blueberry	0-5	Bunchberry	0-5	Pine	14		Spruce	1	2						
1691	170	10m	8	NE	8	Lower Slope	Willow	0-5	Juniper	0-5	Labrador Tea	0-5	Twinflower	5-10	Crowberry	0-5	Bunchberry	0-5	Pine	12		Spruce		5						
1691	280	10m (from stn 5)	9	NW	9	Upperslope	Willow	0-5					Crowberry	5-10	Blueberry	0-5	Wintergreen	0-5	Pine	9		Spruce	5	3						
1691	280	10m	10	NE	7	Upperslope	Willow	0-5					Crowberry	5-10	Blueberry	0-5	Bunchberry	0-5	Spruce	16	1	Pine	1							
1691			11	NW	1	Crest	Soapberry	0-5					Blueberries	5-10	Wintergreen	0-5			Pine	16		Spruce	2	1						

1691			12	NW	1	Crest	Soapberry	5-10	Juniper	0-5			Crowberry	5-10	Twinflower	0-5	Wintergreen	0-5	Pine	22		Spruce	3							
1783	208	20m	1	SW	9	Lower Slope	Soapberry	5-10	Juniper	0-5			Kinicknick	>25	Twinflower	5-10	Crowberry	0-5	Pine	18	10									
1783	208	95m	2	n/a	n/a	Level	Soapberry	0-5	Juniper	0-5			Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Pine	21	16									
1783	208	95m	3	n/a	n/a	Level	Willow	5-10	Soapberry	0-5	Juniper	0-5	Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Pine	13	7									
1783	208	95cm	4	n/a	n/a	Level	Willow	>25	Juniper	0-5			Kinicknick	10-25	Twinflower	5-10	Strawberry	0-5	Pine	9		Spruce	1							
1783	208	95m	5	NW	8	Upperslope	Soapberry	0-5	Juniper	0-5			Crowberry	5-10	Kinicknick	0-5	Fireweed	0-5	Pine	19	14									
1783	208	95m	6	N	8	Lower Slope	Juniper	5-10	Soapberry	0-5			Kinicknick	>25	Crowberry	0-5	Twinflower	0-5	Pine	13		Spruce	1							
1783	298	95m (from midpoint)	7	n/a	n/a	Level	Willow	0-5					Kinicknick	>25	Twinflower	5-10	Bunchberry	0-5	Pine	9		Spruce	1	1						
1783	298	95m	8	NW	11	Upperslope	Soapberry	0-5	Juniper	0-5			Kinicknick	>25	Crowberry	5-10			Pine	7										
1783	298	95m	9	NW	11	midslope	Willow	10-25	Soapberry	0-5	Juniper	0-5	Kinicknick	>25	Crowberry	10-25			Pine	16	4	Spruce	1							
1783	118	95m	10	n/a	n/a	Level	Willow	5-10	Soapberry	0-5	Juniper	0-5	Kinicknick	10-25	Twinflower	5-10	Strawberry	0-5	Pine	10		Spruce	1							
1783	118	95m	11	n/a	n/a	Level	Soapberry	5-10	Willow	0-5	Juniper	0-5	Crowberry	10-25	Twinflower	5-10	Strawberry	0-5	Pine	11	2	Spruce	1							
1783	118	95m	12	n/a	n/a	Level	Willow	0-5	Rose	0-5			Twinflower	0-5	Strawberry	0-5			Spruce	6		Pine	1	2						
1803	196		1	W	25	midslope	Mtn Alder	>25	Willow	0-5			Twinflower	0-5	Bunchberry	0-5			Pine	21		Spruce	4		Balsm	5				
1803	196	55m	2	W	26	midslope	Mtn Alder	10-25	Juniper	0-5			Twinflower	5-10	Blueberry	5-10	Bunchberry	0-5	Pine	16										
1803	196	55m	3	W	31	midslope	Mtn Alder	10-25	Juniper	5-10			Twinflower	10-25	Blueberry	5-10	Fireweed	5-10	Pine		16									
1803	196	55m	4	W	24	midslope	Mtn Alder	>25	Juniper	0-5			Bunchberry	0-5	Fireweed	0-5			Pine	17										
1803	196	55m	5	W	12	midslope	Mtn Alder	10-25	Willow	5-10			Twinflower	0-5	Blueberry	0-5	Fireweed	0-5	Pine	19										
1803	196	55m	6	W	23	midslope	Soapberry	0-5	Juniper	0-5			Blueberries	5-10	Bunchberry	0-5	Fireweed	0-5	Pine	20	2									
1803	196	55m	7	W	20	midslope	Soapberry	10-25	Mtn Alder	5-10			Blueberries	0-5	Twinflower	0-5	Fireweed	0-5	Pine	34	1									
1803	196	55m	8	W	36	midslope	Mtn Alder	10-25	Juniper	5-10			Twinflower	5-10	Blueberry	0-5	Bunchberry	0-5	Pine	25		Balsm	2							

1803	286	50m	9	W	22	Upperslope	Mtn Alder	10-25	Juniper				Blueberries	5-10	Twinflower	0-5	Fireweed	0-5	Pine	19										
1803	286	50m	10	W	16	Upperslope	Mtn Alder	5-10					Blueberries	5-10	Twinflower	0-5	Fireweed	0-5	Pine	36	1									
1803	106	55m (from mid point)	11	W	20	midslope	Mtn Alder	>25	Juniper	0-5			Twinflower	0-5	Blueberry	0-5	Fireweed	0-5	Pine	19		Spruce	1							
1803	106	55m	12	W	18	midslope	Mtn Alder	10-25	Soapberry	5-10			Bunchberry	5-10	Fireweed	5-10	Twinflower	0-5	Pine	14	15									
1808	255	20m	1	S	13	Toe	Soapberry	5-10	Willow	0-5	Juniper	0-5	Crowberry	>25	Kinicknick	10-25	Blueberry	5-10	Pine	20		Spruce	9							
1808	255	40m	2	N	27	midslope	Soapberry	5-10	Willow	0-5			Crowberry	>25	Kinicknick	10-25	Lupine	0-5	Pine	14		Spruce	1							
1808	255	40m	3	SW	6	Upperslope	Juniper	5-10	Soapberry	0-5	Rose	0-5	Kinicknick	10-25	Blueberry	0-5	Bunchberry	0-5	Pine	12										
1808	255	40m	4	NE	10	Depression	Mtn Alder	10-25	Willow	0-5	Black Twinberry	0-5	Bunchberry	5-10	Crowberry	5-10	Clubmoss	0-5	Pine	2		Spruce	4							
1808	255	40m	5	n/a	n/a	Crest	Juniper	5-10	Soapberry	0-5			Kinicknick	10-25	Bunchberry	0-5			Pine	11	5						1	5m	355	5
1808	255	40m	6	E	45	Upperslope	Soapberry	5-10	Juniper	0-5	Rose	0-5	Kinicknick	10-25	Twinflower	5-10	Bunchberry	0-5	Pine	12										
1808	255	32m	7	E	16	Lower Slope	Juniper	5-10	Soapberry	0-5			Kinicknick	10-25	Blueberry	0-5			Pine	15	4									
1808	255	40m	8	W	15	Upperslope	Juniper	5-10	Soapberry	0-5			Kinicknick	10-25	Bunchberry	0-5	Blueberry	0-5	Pine	4		Balsm	3							
1808	255	40m	9	E	2	Upperslope	Soapberry	5-10	Juniper	0-5	Rose	0-5	Blueberries	5-10	Kinicknick	0-5			Pine	7										
1808	255	40m	10	n/a	n/a	Crest	Juniper	5-10	Soapberry	0-5	Willow	0-5	Kinicknick	0-5	Blueberry	0-5			Pine	10	3									
1808	355	40m	11	E	44	midslope	Juniper	5-10	Soapberry	0-5	Willow	0-5	Crowberry	5-10	Twinflower	0-5	Toadflax	0-5	Pine	10	2									
1808	355	40m	12	SW	18	Lower Slope	Mtn Alder	5-10	Black Twinberry	5-10	Soapberry	0-5	Bunchberry	10-25	Pyrola spp	5-10			Pine	12		Spruce	4	1	Balsm	2				
1808	355	55m	13	SW	4	Upperslope	Soapberry	0-5	Juniper	0-5			Kinicknick	10-25	Blueberry	0-5			Pine	19	3									
1848	80		1	N	21	Upperslope	Soapberry	10-25	Willow	5-10	Rose	0-5	Kinicknick	10-25	Strawberry	0-5			Pine	4										
1848	80	50m	2	n/a	n/a	Depression	Soapberry	>25	Juniper	10-25	Willow	5-10	Bunchberry	5-10	Strawberry	0-5	Twinflower	0-5	Pine	8		AT	2	4						
1848	80	50m	3	N	28	Upperslope	Soapberry	10-25	Juniper	0-5	Rose	0-5	Kinicknick	5-10	Twinflower	0-5			Pine	13										

1848	83	50m	4	N	17	Upperslope	Soapberry	5-10	Willow	5-10	mtn alder	0-5	Kinicknick	5-10	Strawberry	5-10	Bunchberry	0-5	Pine	11										
1848	83	50m	5	N	20	Upperslope	Soapberry	5-10					Kinicknick	5-10	Blueberry	0-5			Pine	2										
1848	83	50m	6	N	30	midslope	Soapberry	10-25	Rose	0-5			Kinicknick	10-25	Blueberry	0-5	Twinflower	0-5	Pine	15	2									
1848	83	50m	7	N	35	Upperslope	Soapberry	10-25	Willow	0-5	Juniper	0-5	Kinicknick	5-10	Blueberry	5-10	Strawberry	0-5	Pine	5										
1848	83	50m	8	n/a	40	Crest	Soapberry	10-25	Rose	0-5			Kinicknick	5-10	Blueberry	0-5			Pine	15	11									
1848	83	50m	9	S	33	Upperslope	Soapberry	10-25	Juniper	5-10	Willow	0-5	Kinicknick	5-10	Blueberry	0-5			Pine	14										
1848	POT		10	S	17	Lower Slope	Soapberry	10-25	Juniper	5-10			Kinicknick	10-25	Strawberry	0-5			Pine	18										
1848	353	POT	11	W	20	midslope	Soapberry	10-25	Juniper	5-10	Willow	0-5	Kinicknick	10-25	Strawberry	0-5	Twinflower	0-5	Pine	15										
1848	173	POT	12	w	36	midslope	Soapberry	10-25	Rose	0-5			Kinicknick	10-25	Blueberry	0-5	Fireweed	0-5	Pine	11										
1888	171	35m	1	E	26	Upperslope	Soapberry	0-5	Juniper	0-5			Blueberries	5-10	Twinflower	0-5	Crowberry	0-5	Pine	20	6									
1888	171	35m	2	E	16	Upperslope	Soapberry	5-10	Juniper	0-5			Crowberry	5-10	Bunchberry	0-5	Twinflower	0-5	Pine	11	5									
1888	171	35m	3	E	5	Upperslope	Soapberry	10-25					Blueberries	5-10	Twinflower	5-10	Fireweed	0-5	Pine	25	7									
1888	171	35m	4	E	3	Upperslope	Soapberry	10-25	Juniper	0-5			Twinflower	5-10	Bunchberry	0-5	Kinicknick	0-5	Pine	17	10	Spruce	1							
1888	171	35m	5	E	11	Upperslope	Soapberry	10-25	Willow	0-5			Bunchberry	5-10	Blueberry	0-5	Twinflower	0-5	Pine	18	13	Spruce	1							
1888	171	35m	6	E	17	midslope	Soapberry	5-10	Juniper	0-5			Kinicknick	5-10	Crowberry	0-5	Twinflower	0-5	Pine	17										
1888	171	35m	7	E	13	midslope	Soapberry	5-10	Juniper	0-5			Bunchberry	0-5	Twinflower	0-5	Kinicknick	0-5	Pine	30	15									
1888	171	35m	8	E	28	midslope	Soapberry	>25	Willow	0-5			Bunchberry	5-10	Crowberry	0-5	Blueberry	0-5	Pine	17	12									
1888	171	35m	9	E	25	midslope	Soapberry	5-10					Blueberries	5-10	Kinicknick	0-5	Bunchberry	0-5	Pine	19	12	Spruce	1							
1888	171	35m	10	E	20	midslope	Soapberry	10-25	Juniper	5-10			Blueberries	0-5	Twinflower	0-5	Crowberry	0-5	Pine	25	10	Spruce	1							
1888	81	35m	11	E	9	Upperslope	Soapberry	10-25	Juniper	0-5			Bunchberry	5-10	Twinflower	5-10	Kinicknick	0-5	Pine	18	9									

1888	361	35m	12	E	16	Upperslope	Soapberry	5-10					Bunchberry	0-5	Blueberry	0-5	Crowberry	0-5	Pine	12	20									
1959	268		1	E	4	Lower Slope	Soapberry	>25	Willow	10-25			Kinicknick	10-25	Twinflower	5-10	Strawberry	0-5	Pine	9										
1959	268	25m	2	W	17	Upperslope	Soapberry	5-10	Rose	0-5			Kinicknick	10-25	Twinflower	0-5	Fireweed	0-5	Pine	5	1									
1959	268	25m	3	E	13	Upperslope	Soapberry	5-10	0-5				Kinicknick	10-25	Twinflower	0-5			Pine	8										
1959	268	25m	4	n/a	n/a	Toe	Soapberry	5-10	Rose	5-10			Kinicknick	10-25	Fireweed	5-10	Twinflower	0-5	Pine	18	14									
1959	268	45m	5	n/a	n/a	Level	Soapberry	10-25	Rose	0-5			Kinicknick	10-25	Twinflower	5-10	Fireweed	5-10	Pine	15	10	Spruce		6						
1959	358	POT	6	W	6	Lower Slope	Soapberry	5-10	Rose	0-5			Kinicknick	5-10	Fireweed	5-10	Twinflower	0-5	Pine	19	9									
1959	178	45m	7	W	5	midslope	Soapberry	5-10	Rose	0-5			Kinicknick	0-5	Fireweed	0-5	Crowberry	0-5	Pine	25	9									
1959	178	45m	8	W	15	Toe	Soapberry	10-25	Rose	0-5			Kinicknick	10-25	Twinflower	5-10	Fireweed	5-10	Pine	13										
1959	178	45m	9	W	26	Toe	Soapberry	5-10					Kinicknick	5-10	Fireweed	5-10	Twinflower	0-5	Pine	19										
1959	178	45m	10	W	20	Lower Slope	Soapberry	10-25	Rose	5-10			Kinicknick	10-25	Fireweed	5-10	Twinflower	0-5	Pine	17		Spruce	1							
1959	178	45m	11	n/a	n/a	Depression	Willow	>25	Rose	0-5			Kinicknick	5-10	Strawberry	0-5	Milifolia	0-5	AT	5										
1959	178	45m	12	E	9	Toe	Soapberry	10-25	Willow	5-10			Kinicknick	5-10	Fireweed	5-10	Twinflower	0-5	Pine	17		Spruce	1							
2041	152		1	E	35	Upperslope	Soapberry	10-25					Kinicknick	10-25	Rose	5-10	Fireweed	5-10	Pine	6		Spruce	1							
2041	152	25m	2	N	22	midslope	Soapberry	10-25					Kinicknick	10-25	Fireweed	0-5	Rose	0-5	Pine	3										
2041	152	25m	3	N	19	midslope	Soapberry	10-25	Willow	5-10			Kinicknick	10-25	Rose	5-10	Twinflower	0-5	Pine	14	14									
2041	152	25m	4	E	30	Upperslope	Soapberry	5-10	Juniper	0-5	Rose	0-5	Kinicknick	10-25	Fireweed	0-5	Twinflower	0-5	Pine	26	3									
2041	152	25m	5	E	16	midslope	Soapberry	10-25	Willow	0-5	Rose	5-10	Twinflower	5-10	Kinicknick	0-5			Pine	27										
2041	152	25m	6	E	26	midslope	Mtn Alder	10-25	Rose	0-5			Kinicknick	>25	Twinflower	0-5	Fireweed	0-5	Pine	7	1									
2041	242	25m	7	E	12	Lower Slope	Soapberry	10-25	Willow	5-10	Juniper	0-5	Bunchberry	5-10	Twinflower	5-10	Kinicknick	0-5	Pine	5	2	Spruce	2							
2041	242	25m	8	n/a	n/a	Level	Labrador Tea	5-10	Rose	0-5			Crowberry	0-5	Horsetail	0-5			Spruce	5	1									
2041	242	25m	9	W	36	Toe	Willow	10-25	Juniper	5-10			Bunchberry	5-10	Fireweed	0-5	Kinicknick	0-5	Spruce	7	2	Pine	1							

2041	242	25m	10	W	36	Upperslope	Mtn Alder	>25	Rose	0-5			Kinicknick	10-25	Twinflower	0-5			Pine	9		Fir	1							
2041	242	25m	11	n/a	n/a	Crest	Mtn Alder	10-25	Rose	0-5	Soapberry	0-5	Kinicknick	10-25	Rose	0-5			Pine	3		Spruce	1							
2041	242	25m	12	E	6	Upperslope	Mtn Alder	10-25	Soapberry	5-10	Juniper	5-10	Kinicknick	10-25	Twinflower	5-10			Pine	19	2									
2064	316	50m	1	W	5	midslope	Soapberry	5-10					Kinicknick	10-25	Blueberry	0-5	Fireweed	0-5	Pine	7							1	225 m from POC	46	?
2064	316	50m	2	W	5	Upperslope	Juniper	0-5	Rose	0-5			Twinflower	0-5	Fireweed	0-5	Milifolia	0-5	Pine	26		Spruce	3							
2064	316	50m	3	W	37	midslope	Willow	0-5	Soapberry	0-5			Bunchberry	5-10	Kinicknick	0-5			Pine	16	1	Spruce	11		Alnus	1				
2064	226	55m	4	W	15	midslope	Mtn Alder	0-5	Soapberry	0-5			Kinicknick	0-5	Twinflower	0-5	Fireweed	0-5	Pine	30	6									
2064	226	55m	5	W	16	midslope	Soapberry	10-25	Mtn Alder	0-5			Kinicknick	10-25	Twinflower	0-5	Fireweed	0-5	Pine	6	22									
2064	226	50m	6	W	27	midslope	Soapberry	>25					Kinicknick	10-25	Twinflower	5-10	Bunchberry	0-5	Pine	4	21									
2064	260	50m	7	n/a	n/a	Level	Willow	5-10	Juniper	0-5	Rose	0-5	Twinflower	5-10	Kinicknick	0-5	Strawberry	0-5	Pine	17		Spruce	2							
2064	46	50m	8	W	5	midslope	Soapberry	10-25	Mtn Alder	5-10	Juniper	5-10	Kinicknick	>25	Twinflower	0-5			Pine	12										
2064	46	50m	9	W	10	midslope	Mtn Alder	>25	Labrador Tea	0-5			Kinicknick	10-25	Blueberry	0-5	Twinflower	0-5	Pine	10										
2064	116	55m	10	W	14	midslope	Salix spp.	5-10	Rose	0-5			Bunchberry	5-10	Twinflower	0-5	Crowberry	0-5	Pine	16	1	Spruce	5	2	Alnus	2				
2064	116	50m	11	W	3	midslope	Soapberry	10-25	Labrador Tea	5-10			Kinicknick	10-25	Crowberry	5-10	Bunchberry	0-5	Pine	5		Spruce	1							
2064	116	50m	12	W	4	midslope	Willow	10-25	Rose	5-10			Bunchberry	5-10	Twinflower	0-5	Fireweed	0-5	Pine	6	5	Spruce	14							
2109	100		1	W	10	Crest	Juniper	0-5	Soapberry	0-5			Kinicknick	0-5	Arnica	0-5			Pine	1										
2109	100	110m	2	W	25	Upperslope	Juniper	10-25	Soapberry	5-10			Kinicknick	10-25	Twinflower	0-5	Strawberry	0-5	Pine	10	9									
2109	103	110m	3	W	25	Upperslope	Soapberry	10-25	Juniper	5-10	Rose	0-5	Kinicknick	10-25	Twinflower	0-5			Pine	22	1									
2109	103	110m	4	W	5	midslope	Juniper	10-25	Soapberry	5-10			Kinicknick	10-25	Strawberry	0-5			Pine	8		Poplar	2							
2109	103	110m	5	W	35	Lower Slope	Juniper	10-25	Soapberry	5-10			Kinicknick	5-10	Twinflower	0-5	Bunchberry	0-5	Pine	18		Spruce	3							
2109	103	110m	6	E	35	Lower Slope	Soapberry	>25	Juniper	5-10	Rose	0-5	Bunchberry	5-10	Twinflower	0-5	Strawberry	0-5	Pine	6		Poplar	5	3						

2109	103	110m	7	N	35	midslope	Soapberry	10-25	Willow	5-10	Juniper	5-10	Bunchberry	5-10	Kinicknick	0-5			Pine	19	1	Spruce	1							
2109	103	110m	8	E	13	Upperslope	Juniper	10-25	Soapberry	5-10	Willow	0-5	Kinicknick	10-25	Strawberry	5-10	Bunchberry	0-5	Pine	12	1									
2109	103	110m	9	S	8	Crest	Juniper	10-25	Soapberry	5-10			Kinicknick	5-10	Strawberry	0-5	Twinflower	0-5	Pine	5										
2109	103	110m	10	N	13	Upperslope	Juniper	10-25	Soapberry	5-10			Kinicknick	10-25	Bunchberry	0-5	Twinflower	0-5	Pine	10										
2109	13	110m	11	N	70	Lower Slope	Soapberry	10-25	Juniper	10-25			Bunchberry	5-10	Twinflower	0-5	Fireweed	0-5	Pine	17										
2109	193	110m	12	E	15	midslope	Juniper	>25	Soapberry	10-25			Kinicknick	5-10	Strawberry	0-5	Bunchberry	0-5	Pine	27	1									
2113	260	45m	1	n/a	n/a	Level	Soapberry	0-5	Birch Leaf	0-5	Rose	0-5	Crowberry	10-25	Twinflower	5-10	Bunchberry	0-5	Pine	16	13	Spruce	2							
2113	260	95m	2	NW	3	Lower Slope	Soapberry	5-10	Birch Leaf	0-5	Juniper	0-5	Kinicknick	>25	Crowberry	10-25	Twinflower	0-5	Pine	15	2	Spruce	1							
2113	260	95m	3	NW	7	Lower Slope	Soapberry	5-10	Birch Leaf	0-5			Kinicknick	>25	Crowberry	10-25	Twinflower	0-5	Pine	18	2									
2113	260	95m	4	NW	7	Lower Slope	Soapberry	0-5	Willow	0-5	Birch	0-5	Crowberry	>25	Kinicknick	10-25	Blueberry	0-5	Pine	12	7	Spruce	3	6						
2113	260	95m	5	NW	3	Lower Slope	Mtn Alder	0-5	Soapberry	0-5	Juniper	0-5	Crowberry	>25	Kinicknick	10-25	Twinflower	5-10	Pine	23	9									
2113	260	95m	6	NW	4	Lower Slope	Soapberry	5-10	Black Twinberry	0-5	mtn alder	0-5	Twinflower	>25	Crowberry	5-10	Bunchberry	0-5	Pine	18	10	Spruce	1	1						
2113	260	95m	7	NW	9	Lower Slope	Soapberry	5-10	Birch Leaf	0-5	Juniper	0-5	Twinflower	10-25	Bunchberry	0-5	Wintergreen	0-5	Pine	13	4	Spruce	1							
2114	260	95m	8	NW	4	Lower Slope	Soapberry	5-10	Willow	0-5			Twinflower	10-25	Crowberry	0-5	Fireweed	0-5	Pine	12	6	Spruce		2						
2114	260	95m	9	NW	3	Lower Slope	Soapberry	0-5					Twinflower	5-10	Crowberry	0-5	Bunchberry	0-5	Pine	18	6									
2114	260	95m	10	NW	8	Lower Slope	Soapberry	0-5	Juniper	0-5	Rose	0-5	Crowberry	>25	Kinicknick	10-25			Pine	14	4	Balsm	1							
2114	260	60m	11	NW	14	Lower Slope	Soapberry	5-10	Juniper	0-5			Kinicknick	>25	Crowberry	10-25	Wintergreen	0-5	Pine	7		Balsm	1							
2114	260	55m	12	NW	11	Lower Slope	Juniper	5-10	Soapberry	0-5	Rose	0-5	Kinicknick	>25	Crowberry	10-25	Blueberry	0-5	Pine	8	2	Balsm	1							
2473	59	100m	1	SE	4	midslope	Soapberry	0-5	Juniper	0-5			Kinicknick	0-5					Pine	6	2									
2473	59	200m	2	S	5	Lower Slope	Soapberry	0-5					Kinicknick	0-5					Pine	13	1						20	10-15m	S	2

2473	59	200m	3	S	3	midslope	Soapberry	0-5					Kinicknick	0-5					Pine	12	1						3	5-10m	N	3
2473	59	200m	4	S	11	midslope	Soapberry	0-5					Kinicknick	0-5	Twinflower	0-5	Fireweed	0-5	Pine	1	31						32	0-20m	N-NE	6
2473	59	200m	5	S	15	midslope	Juniper	0-5					Kinicknick	0-5	Crowberry	0-5	Twinflower	0-5	Pine	15	8						11	5m	S	6
2473	59	200m	6	S	6	midslope	Soapberry	0-5	Juniper	0-5			Kinicknick	10-25					Pine	12	1						15	4m	N	7
2473	30	200m	7	S	2	midslope	Soapberry	0-5					Kinicknick	5-10					Pine	6							6	0m	N	7
2473	32	200m	8	S	17	midslope	Soapberry	0-5	Juniper	0-5			Kinicknick	10-25	Crowberry	0-5	Twinflower	0-5	Pine		25						2	0m	N	8
2473	32	200m	9	S	24	Upperslope	Soapberry	5-10	Juniper	5-10			Kinicknick	10-25					Pine	8	1						15	5m	N	10
2473	32	200m	10	S	9	Upperslope							Kinicknick	10-25					Pine	19	17						13	5m	N-S	11
2473	32	200m	11	S	3	Upperslope	Soapberry	0-5					Kinicknick	10-25					Pine	8	5						3	10m	S	12
2473	32	200m	12	n/a	4	Depression	Soapberry	5-10	Juniper	0-5			Kinicknick	>25	Twinflower	5-10	Crowberry	0-5	Pine	12	5									
2568	310	25m	1	SE	26	midslope	Juniper	0-5	Juniper	0-5			Kinicknick	0-5					Pine	10										
2568	310	50m	2	SE	8	Upperslope	Soapberry	0-5	Juniper	0-5	Rose	0-5	Kinicknick	5-10					Pine	12	4									
2568	310	50m	3	SE	4	Upperslope	Soapberry	0-5	Juniper	0-5	Rose	0-5	Kinicknick	5-10					Pine	7	2									
2568	310	50m	4	SE	3	Upperslope	Soapberry	0-5	Juniper	0-5	Rose	0-5	Kinicknick	5-10					Pine	3										
2568	310	50m	5	N	9	Upperslope	Soapberry	0-5	Juniper	0-5			Kinicknick	10-25	Birch Leaf	0-5			Pine	8	2									
2568	310	50m	6	N	47	midslope	Soapberry	0-5	Juniper	0-5			Kinicknick	5-10	Bunchberry	0-5			Pine	17	13									
2568	310	50m	7	n/a	n/a	Depression	Willow	10-25	Labrador Tea	5-10	Juniper	5-10	Kinicknick	5-10	Bunchberry	0-5			Pine	11	2	Poplar	3							
2568	310	50m	8	S	38	Lower Slope	Juniper	5-10	Rose	0-5			Kinicknick	5-10					Pine	11	5									
2568	310	50m	9	S	36	midslope	Juniper	10-25					Kinicknick	5-10					Pine	8	1									
2568	310	50m	10	S	18	Upperslope	Soapberry	5-10	Juniper	5-10	Rose	0-5	Kinicknick	10-25					Pine	21	15									

2568	310	50m	11	n/a	n/a	Crest	Juniper	5-10	Soapberry	0-5			Kinicknick	10-25	Birch Leaf	0-5			Pine	11	5									
2568	220	50m	12	N	?	Lower Slope	Rose	0-5					Kinicknick	5-10					Pine	9										
2568	40	66m	13	SE	23	midslope	Juniper	10-25	Soapberry	0-5			Kinicknick	10-25					Pine	10	3									
2916	250	40m	1	NE	4	midslope	Soapberry	0-5					Crowberry	10-25	Twinflower	5-10	Kinicknick	0-5	Pine	19	7	Spruce	1							
2916	250	55m	2	n/a	n/a	Level	Soapberry	0-5	Juniper	0-5			Crowberry	>25	Kinicknick	10-25	Twinflower	5-10	Pine	12	4	Spruce		2						
2916	250	55m	3	NE	2	Upperslope	Juniper	0-5	Soapberry	0-5	Rose	0-5	Crowberry	10-25	Kinicknick	5-10	Twinflower	0-5	Pine	14										
2916	250	55m	4	NE	7	Upperslope	Soapberry	0-5					Crowberry	10-25	Bunchberry	0-5	Fireweed	0-5	Pine	17										
2916	250	55m	5	E	18	Upperslope	Soapberry	0-5					Kinicknick	10-25	Pyrola spp	0-5			Pine	24	6									
2916	250	55m	6	W	2	Upperslope	Soapberry	0-5	Rose	0-5			Kinicknick	5-10	Fireweed	0-5			Pine	18							3	5m	NW	6
2916	250	55m	7	N	24	midslope	Soapberry	0-5					Kinicknick	10-25	Bunchberry	0-5	Crowberry	0-5	Pine	21										
2916	250	55m	8	NW	5	Toe	Black Twinberry	5-10	Gooseberry	0-5	Soapberry	0-5	Clubmoss	10-25	Bunchberry	5-10	Twinflower	0-5	Spruce	21		Pine	3							
2916	250	55m	9	n/a	n/a	Depression	Black Twinberry	5-10	Willow	0-5	Rose	0-5	Twinflower	5-10	Bunchberry	5-10	Pyrola spp.	0-5	Spruce	18		Pine	6							
2916	250	55m	10	NE	29	midslope	Soapberry	0-5	Willow	0-5			Blueberries	5-10	Bunchberry	0-5	Twinflower	0-5	Pine	21		Spruce	1							
2916	250	55m	11	n/a	n/a	Depression	Soapberry	0-5					Kinicknick	10-25	Twinflower	5-10	Crowberry	0-5	Pine	20	6									
2916	250	55m	12	S	9	Toe	Soapberry	0-5					Crowberry	>25	Twinflower	5-10	Bunchberry	0-5	Pine	18	6	Spruce	1							

YKW 2005 Pine Mushroom Map Verification Project - Soil Data

Sample	pass 2 mm sieve %	Texture weight gm (40)	small	Sand %	Silt %	Clay %	Comments:	Texture	Texture class	Sample	ID
1	69.0	1.14	!	27.7	62.1	10.1		SiL	coarse	**1**	YKW PM Poly 86 Stn: POC
2	73.4	31.53		24.4	66.0	9.7		SiL	coarse	**2**	YKW PM Poly 86 Stn: 6
3	55.0	32.46		32.8	57.9	9.4		SiL	coarse	**3**	YKW PM Poly 86 Stn: 9
4	65.5	40.00		21.5	47.9	30.6		CL	Fine	**4**	YKW PM Poly 116 Stn: POC
5	73.7	40.00		30.0	59.8	10.2		SiL	coarse	**5**	YKW PM Poly 116 Stn: 3
6	70.9	31.11		1.7	30.4	68.0	mostly woody material	HC	Fine	**6**	YKW PM Poly 116 Stn: 7
7	46.5	37.31		35.1	48.0	16.9	a few stones > 10 mm	L	coarse	**7**	YKW PM Poly 138 Stn: POC
8	19.9	14.94		36.7	45.7	17.6		L	coarse	**8**	YKW PM Poly 138 Stn: 5
9	37.0	16.27		46.0	38.1	15.9		L	coarse	**9**	YKW PM Poly 138 Stn: 6
10	46.9	23.54		54.8	40.9	4.3		SL	coarse	**10**	YKW PM Poly 220 Stn: POC
11	49.4	39.99		59.4	36.8	3.8		SL	coarse	**11**	YKW PM Poly 220 Stn: 1
12	66.2	19.18		52.4	39.7	7.9		SL	coarse	**12**	YKW PM Poly 220 Stn: 4
13	65.5	39.96		37.9	55.8	6.3		SiL	coarse	**13**	YKW PM Poly 220 Stn: 7
14	69.2	18.85		40.7	54.0	5.4		SiL	coarse	**14**	YKW PM Poly 220 Stn: 8
15	13.6	9.04		32.6	61.8	5.6	a lot > 10 mm stones	SiL	coarse	**15**	YKW PM Poly 220 Stn: 11
16	48.8	22.02		44.5	46.2	9.3		L	coarse	**16**	YKW PM Poly 233 Stn: POC
17	60.3	40.01		44.1	48.3	7.6		SiL	coarse	**17**	YKW PM Poly 233 Stn: 1
18	72.5	30.05		45.8	49.1	5.1		SL	coarse	**18**	YKW PM Poly 233 Stn: 4
19	65.6	36.16		39.8	54.6	5.6		SiL	coarse	**19**	YKW PM Poly 233 Stn: 6
20	22.8	17.65		71.1	26.0	2.9	a lot > 10 mm stones	SL	sandy	**20**	YKW PM Poly 233 Stn: 8
21	67.9	29.87		60.9	34.0	5.1		SL	coarse	**21**	YKW PM Poly 233 Stn: 10
22	43.5	21.76		59.9	37.7	2.4			coarse	**22**	YKW PM Poly 233 Stn: 13
23	75.5	40.03		35.5	59.4	5.1			coarse	**23**	YKW PM Poly 238 Stn: POC
24	65.3	40.00		27.7	67.2	5.1			coarse	**24**	YKW PM Poly 238 Stn: 2
25	49.9	40.07		29.3	65.6	5.1			coarse	**25**	YKW PM Poly 238 Stn: 3

26	75.7	12.20		62.4	33.4	4.2		coarse	**26**	YKW PM Poly 238 Stn: 4
27	77.6	39.93		36.5	57.1	6.4		coarse	**27**	YKW PM Poly 238 Stn: 5
28	52.1	39.43		44.6	n/a	n/a		coarse	**28**	YKW PM Poly 238 Stn: 6
29	60.4	32.37		26.3	67.5	6.3		coarse	**29**	YKW PM Poly 240 Stn: POC
30	66.2	13.22		53.8	38.5	7.7		coarse	**30**	YKW PM Poly 240 Stn: 9
31	38.6	15.30		30.2	n/a	n/a		coarse	**31**	YKW PM Poly 259 Stn: POC
32	23.0	17.04		31.4	n/a	n/a	a lot > 10 mm stones	coarse	**32**	YKW PM Poly 259 Stn: 2
33	62.6	21.15		56.7	n/a	n/a		coarse	**33**	YKW PM Poly 259 Stn: 6
34	83.7	20.68		56.0	n/a	n/a		coarse	**34**	YKW PM Poly 259 Stn: 11
35	57.7	10.54		75.9	14.5	9.6		coarse	**35**	YKW PM Poly 316 Stn: 1
36	30.7	30.21		56.1	n/a	n/a		coarse	**36**	YKW PM Poly 316 Stn: 2
37	75.7	39.95		72.0	20.4	7.7		coarse	**37**	YKW PM Poly 316 Stn: 5
38	55.2	13.33		57.5	27.0	15.5		coarse	**38**	YKW PM Poly 316 Stn: 9
39	51.1	39.98		89.8	5.1	5.1		sandy	**39**	YKW PM Poly 320 Stn: POC
40	58.8	20.72		51.1	39.1	9.8		coarse	**40**	YKW PM Poly 320 Stn: 12
41	68.9	39.97		61.1	33.7	5.2		coarse	**41**	YKW PM Poly 344 Stn: 1
42	43.9	20.64		75.1	12.4	12.4		coarse	**42**	YKW PM Poly 344 Stn: 3
43	36.5	35.02		55.6	32.6	11.9	a lot > 10 mm stones	coarse	**43**	YKW PM Poly 344 Stn: 8
44	69.8	40.08		66.8	29.3	3.8		coarse	**44**	YKW PM Poly 344 Stn: 11
45	94.0	27.91		74.6	18.2	7.3		coarse	**45**	YKW PM Poly 355 Stn: POC
46	35.0	3.99	**!**	35.3	25.9	38.8		coarse	**46**	YKW PM Poly 355 Stn: 2
47	93.8	15.91		29.3	48.2	22.5		coarse	**47**	YKW PM Poly 355 Stn: 4
48	73.8	15.12		49.8	36.9	13.4		coarse	**48**	YKW PM Poly 355 Stn: 7
49	75.1	11.03		53.5	37.2	9.3		coarse	**49**	YKW PM Poly 355 Stn: 9
50	85.1	13.60		43.7	45.1	11.3		coarse	**50**	YKW PM Poly 355 Stn: 11
51	70.5	26.29		42.0	50.3	7.7		coarse	**51**	YKW PM Poly 413 Stn: POC
52	66.2	26.52		20.8	53.5	25.7		Fine	**52**	YKW PM Poly 413 Stn: 3
53	48.0	40.05		49.2	40.6	10.2		coarse	**53**	YKW PM Poly 413 Stn: 8
54	80.6	40.02		29.4	65.6	5.0		coarse	**54**	YKW PM Poly 413 Stn: 12
55	78.7	39.95		59.0	35.9	5.1		coarse	**55**	YKW PM Poly 420 Stn: POC

56	59.3	40.03		65.7	30.5	3.8		coarse	**56**	YKW PM Poly 420 Stn: 5
57	59.2	40.06		66.9	29.3	3.8		coarse	**57**	YKW PM Poly 420 Stn: 6
58	76.0	14.35		18.7	31.0	50.4		Fine	**58**	YKW PM Poly 420 Stn: 9
59	43.3	34.93		71.1	23.1	5.8	a few stones > 10 mm	coarse	**59**	YKW PM Poly 455 Stn: POC
60	57.9	20.35		28.4	56.3	15.4		coarse	**60**	YKW PM Poly 455 Stn: 3
61	60.8	39.99		46.7	48.3	5.1	a few stones > 10 mm	coarse	**61**	YKW PM Poly 455 Stn: 8
62	58.2	40.02		50.5	41.9	7.6		coarse	**62**	YKW PM Poly 544 Stn: POC
63	58.4	40.07		74.6	19.0	6.3		coarse	**63**	YKW PM Poly 544 Stn: POT
64	61.0	40.00		34.1	49.4	16.5		coarse	**64**	YKW PM Poly 544 Stn: 5
65	38.0	9.92		53.6	30.9	15.5		coarse	**65**	YKW PM Poly 563 Stn: POC
66	45.7	15.04		59.5	30.4	10.1		coarse	**66**	YKW PM Poly 563 Stn: 1
67	49.6	9.52		52.2	31.9	15.9		coarse	**67**	YKW PM Poly 563 Stn: 2
68	73.1	15.20		79.9	10.0	10.0		sandy	**68**	YKW PM Poly 563 Stn: 3
69	70.2	10.37		55.7	29.6	14.8		coarse	**69**	YKW PM Poly 563 Stn: 5
70	66.0	14.77		44.9	41.3	13.8		coarse	**70**	YKW PM Poly 563 Stn: 6
71	5.9	1.84	!	16.7	0.0	83.3	mostly > 10 mm stones	Fine	**71**	YKW PM Poly 563 Stn: 8
72	40.7	39.97		83.5	11.5	5.1		sandy	**72**	YKW PM Poly 590 Stn: POC
73	62.1	40.05		67.1	24.0	8.9		coarse	**73**	YKW PM Poly 590 Stn: 2
74	53.9	22.52		56.7	31.9	11.4		coarse	**74**	YKW PM Poly 590 Stn: 5
75	67.4	40.14		63.3	30.4	6.3		coarse	**75**	YKW PM Poly 590 Stn: 12
76	51.0	40.11		64.4	28.0	7.6		coarse	**76**	YKW PM Poly 637 Stn: 2
77	13.7	12.35		54.3	24.9	20.8	one stone > 20 mm	Fine	**77**	YKW PM Poly 637 Stn: 4
78	61.2	40.10		59.4	34.3	6.4		coarse	**78**	YKW PM Poly 637 Stn: 5
79	52.5	40.05		36.2	48.2	15.6		coarse	**79**	YKW PM Poly 637 Stn: 8
80	75.8	36.46		66.5	26.6	7.0		coarse	**80**	YKW PM Poly 1124 Stn: POC
81	97.9	40.01		33.5	56.3	10.2		coarse	**81**	YKW PM Poly 1124 Stn: 1
82	97.6	38.53		56.1	35.9	8.0		coarse	**82**	YKW PM Poly 1124 Stn: 5
83	93.6	20.93		25.7	59.4	14.9		coarse	**83**	YKW PM Poly 1124 Stn: 11
84	81.0	5.97	!	56.6	26.1	17.4		coarse	**84**	YKW PM Poly 1326 Stn: POC
85	80.5	14.54		61.2	31.8	7.1		coarse	**85**	YKW PM Poly 1326 Stn: 3

86	79.0	10.30		55.1	35.0	10.0		coarse	**86**	YKW PM Poly 1326 Stn: 5
87	70.5	5.69	!	18.5	72.4	9.1		coarse	**87**	YKW PM Poly 1326 Stn: 7
88	63.7	12.95		44.7	51.3	4.0		coarse	**88**	YKW PM Poly 1485 Stn: 2
89	89.0	15.20		76.4	23.6	0.0		sandy	**89**	YKW PM Poly 1485 Stn: 7a
90	89.6	15.92		61.4	35.4	3.2		coarse	**90**	YKW PM Poly 1485 Stn: 7b
91	85.5	39.99		57.8	37.1	5.1		coarse	**91**	YKW PM Poly 1551 Stn: POC
92	65.0	39.32		53.1	39.1	7.8		coarse	**92**	YKW PM Poly 1551 Stn: 2
93	67.6	30.97		38.5	53.2	8.3		coarse	**93**	YKW PM Poly 1551 Stn: 7
94	46.8	40.05		61.7	33.2	5.1	one stone > 20 mm	coarse	**94**	YKW PM Poly 1557 Stn: POC
95	72.9	40.03		62.4	32.4	5.2		coarse	**95**	YKW PM Poly 1567 Stn: POC
96	51.0	40.06		47.1	47.8	5.2	one stone > 20 mm	coarse	**96**	YKW PM Poly 1567 Stn: 3
97	80.2	39.96		52.6	42.3	5.1		coarse	**97**	YKW PM Poly 1567 Stn: 9 POT
98	76.9	34.00		9.8	24.2	66.0		Fine	**98**	YKW PM Poly 1632 Stn: POC
99	62.1	39.96		73.2	20.5	6.4		coarse	**99**	YKW PM Poly 1632 Stn: 1
100	60.2	32.99		58.2	37.1	4.6		coarse	**100**	YKW PM Poly 1632 Stn: 3
101	46.7	22.06		73.3	19.4	7.3	a lot of organic matter	coarse	**101**	YKW PM Poly 1648 Stn: POC
102	50.4	40.02		67.7	28.5	3.9		coarse	**102**	YKW PM Poly 1648 Stn: POT
103	45.6	40.07		71.7	24.5	3.9	two stones > 20 mm	coarse	**103**	YKW PM Poly 1648 Stn: 2
104	23.8	24.89		64.4	31.4	4.2	three stones > 20 mm	coarse	**104**	YKW PM Poly 1648 Stn: 5
105	70.0	27.56		44.9	43.7	11.4		coarse	**105**	YKW PM Poly 1691 Stn: 1
106	74.2	20.39		61.7	33.2	5.1		coarse	**106**	YKW PM Poly 1691 Stn: 4
107	70.1	23.19		47.1	44.1	8.8		coarse	**107**	YKW PM Poly 1691 Stn: 8
108	72.3	7.51		51.7	34.5	13.8		coarse	**108**	YKW PM Poly 1783 Stn: POC
109	83.6	7.77		66.8	13.3	19.9		Fine	**109**	YKW PM Poly 1783 Stn: 2a
110	87.8	25.86		56.2	37.8	6.0		coarse	**110**	YKW PM Poly 1783 Stn: 2b
111	38.1	34.68		64.5	29.6	5.9	a few stones > 10 mm	coarse	**111**	YKW PM Poly 1783 Stn: 4
112	83.5	40.06		64.4	30.5	5.1		coarse	**112**	YKW PM Poly 1783 Stn: 5
113	63.5	10.67		31.1	39.4	29.5		Fine	**113**	YKW PM Poly 1783 Stn: 10
114	46.5	18.97		54.0	32.5	13.5	one stone > 20 mm	coarse	**114**	YKW PM Poly 1803 Stn: POC
115	75.6	24.77		54.3	35.3	10.4		coarse	**115**	YKW PM Poly 1803 Stn: 2

116	64.8	13.65		51.2	33.8	15.0		coarse	**116**	YKW PM Poly 1803 Stn: 8
117	47.5	40.02		51.9	36.4	11.7	one stone > 20 mm	coarse	**117**	YKW PM Poly 1808 Stn: POC
118	58.9	39.96		43.4	47.6	9.0		coarse	**118**	YKW PM Poly 1808 Stn: 1
119	62.3	31.54		69.3	22.6	8.1		coarse	**119**	YKW PM Poly 1808 Stn: 2
120	61.1	40.03		70.7	25.5	3.8		coarse	**120**	YKW PM Poly 1808 Stn: 5
121	69.1	9.57		83.9	5.4	10.7		sandy	**121**	YKW PM Poly 1848 Stn: POC
122	83.8	18.17		63.3	25.4	11.3		coarse	**122**	YKW PM Poly 1848 Stn: 1
123	84.5	26.89		56.3	38.1	5.7		coarse	**123**	YKW PM Poly 1848 Stn: 4
124	72.5	5.53	**!**	53.8	27.7	18.5		coarse	**124**	YKW PM Poly 1848 Stn: 6
125	70.7	2.82	**!**	63.7	0.0	36.3		Fine	**125**	YKW PM Poly 1848 Stn: 7
126	57.3	13.94		66.8	22.1	11.1		coarse	**126**	YKW PM Poly 1848 Stn: 9
127	49.7	39.94		57.2	36.3	6.5	a few stones > 10 mm	coarse	**127**	YKW PM Poly 1888 Stn: POC
128	89.9	19.46		54.9	34.5	10.6		coarse	**128**	YKW PM Poly 1888 Stn: 1
129	75.6	16.89		48.3	36.5	15.2		coarse	**129**	YKW PM Poly 1888 Stn: 2
130	66.2	12.62		41.9	41.5	16.6		coarse	**130**	YKW PM Poly 1888 Stn: 8
131	96.5	23.40		67.5	26.0	6.5		coarse	**131**	YKW PM Poly 1959 Stn: POC
132	85.2	19.54		76.5	15.6	7.8		coarse	**132**	YKW PM Poly 1959 Stn: 2
133	93.0	22.12		65.4	25.4	9.2		coarse	**133**	YKW PM Poly 1959 Stn: 5
134	65.4	12.11		66.4	21.0	12.6		coarse	**134**	YKW PM Poly 1959 Stn: 6
135	95.3	18.65		83.5	8.2	8.2		sandy	**135**	YKW PM Poly 1959 Stn: 8
136	95.6	7.80		39.8	20.1	40.2		coarse	**136**	YKW PM Poly 1959 Stn: 11
137	81.7	9.33		55.5	33.4	11.1		coarse	**137**	YKW PM Poly 2041 Stn: POC
138	66.7	4.62	**!**	41.9	35.6	22.5		Fine	**138**	YKW PM Poly 2041 Stn: 1
139	30.0	5.20	**!**	60.5	29.7	9.9		coarse	**139**	YKW PM Poly 2041 Stn: 3
140	90.3	10.19		54.0	35.8	10.2		coarse	**140**	YKW PM Poly 2041 Stn: 6
141	84.3	40.08		60.8	34.2	5.1		coarse	**141**	YKW PM Poly 2064 Stn: POC
142	89.5	39.95		67.1	29.1	3.8		coarse	**142**	YKW PM Poly 2064 Stn: 1
143	63.9	33.30		46.0	35.5	18.5		Fine	**143**	YKW PM Poly 2064 Stn: 3
144	80.2	40.01		60.6	34.3	5.1		coarse	**144**	YKW PM Poly 2064 Stn: 4
145	65.7	39.94		74.6	19.1	6.4		coarse	**145**	YKW PM Poly 2064 Stn: 10

146	55.8	20.88	65.8	24.4	9.8		coarse	**146**	YKW PM Poly 2109 Stn: POC
147	66.0	31.87	80.9	14.3	4.8	one stone > 20 mm	sandy	**147**	YKW PM Poly 2109 Stn: 1?(2019)
148	73.2	39.93	58.8	32.2	9.0		coarse	**148**	YKW PM Poly 2109 Stn: 7
149	60.8	40.03	54.0	32.0	14.1		coarse	**149**	YKW PM Poly 2113 Stn: POC
150	51.2	40.01	59.6	31.5	8.8		coarse	**150**	YKW PM Poly 2113 Stn: 2
151	93.3	40.04	77.3	17.6	5.0		sandy	**151**	YKW PM Poly 2113 Stn: 3
152	78.5	40.04	66.9	22.9	10.2	one stone > 20 mm	coarse	**152**	YKW PM Poly 2113 Stn: 6
153	78.4	40.03	82.3	13.9	3.8		sandy	**153**	YKW PM Poly 2473 Stn: POC
154	74.5	31.15	60.8	36.0	3.3		coarse	**154**	YKW PM Poly 2473 Stn: 4
155	90.2	40.03	64.6	32.9	2.5		coarse	**155**	YKW PM Poly 2473 Stn: 5
156	63.2	40.00	71.0	25.2	3.8	one stone > 20 mm	coarse	**156**	YKW PM Poly 2473 Stn: 9
157	95.0	40.03	79.9	17.6	2.5		sandy	**157**	YKW PM Poly 2473 Stn: 12
158	99.3	40.05	93.7	3.8	2.5		sandy	**158**	YKW PM Poly 2568 Stn: POC
159	94.7	34.15	75.8	14.5	9.7		coarse	**159**	YKW PM Poly 2568 Stn: 7
160	78.3	40.10	57.8	38.3	3.8		coarse	**160**	YKW PM Poly 2916 Stn: POC
161	69.5	40.09	68.2	29.2	2.5		coarse	**161**	YKW PM Poly 2916 Stn: 6
162	26.1	40.01	64.5	30.5	5.1	three stones > 20 mm	coarse	**162**	YKW PM Poly 2916 Stn: 12

YKW 2005 Pine Mushroom Map Verification Project – Age Data

Polygon	Site/Stn #	Age
86	1	66
86	2	62
86	3	56
86	4	108
86	5	65
86	6	56
86	7	91
86	8	110
86	9	97
86	10	48
86	11	45
86	12	50
86	13	41
116	1	poor sample - no accurate count
116	2	poor sample - no accurate count
116	3	98
116	4	83
116	5	118
116	6	ND
116	7	100
116	8	81
116	9	108
116	10	102
116	11	ND
116	12	ND
138	1	123
138	2	99
138	3	105
138	4	62
138	5	77
138	6	81
138	7	101
138	8	113
138	9	102
138	10	110
220	1	93
220	2	87
220	3	95
220	4	92
220	5	99
220	6	88
220	7	79
220	8	85
220	9	87
220	10	149
220	11	88
220	12	89
233	1	98
233	2	94
233	3	74
233	4	101
233	5	81
233	6	51
233	7	95
233	8	81
233	9	92
233	10	93
233	11	91
233	12	84
238	1	92
238	2	89
238	3	92
238	4	47
238	5	72
238	6	70
238	7	97
238	8	43
238	9	246
238	10	66
240	1	85
240	2	95
240	3	90
240	4	95
240	5	73
240	6	106
240	7	86
240	8	99
240	9	81
240	10	79
240	11	65
240	12	83
259	1	46
259	2	68
259	3	58
259	4	88
259	5	80
259	6	86
259	7	66
259	8	76
259	9	123
259	10	83
259	11	88
316	1	78
316	2	79
316	3	104
316	4	102
316	5	105

Polygon	Site/Stn #	Age
316	6	77
316	7	81
316	8	89
316	9	77
316	10	62
316	11	98
316	12	81
316	13	179
320	1	95
320	2	101
320	3	71
320	4	87
320	5	76
320	6	85
320	7	87
320	8	70
320	9	94
320	10	64
320	11	72
320	12	82
344	1	80
344	2	121
344	3	150
344	4	100
344	5	88
344	6	79
344	7	82
344	8	ND
344	9	98
344	10	131
344	11	69
344	12	66
355	1	97
355	2	99
355	3	98
355	4	90
355	5	84
355	6	96
355	7	94
355	8	66
355	9	103
355	10	74
355	11	88
355	12	98
413	1	99
413	2	101
413	3	102
413	4	117
413	5	125
413	6	79
413	7	85

Polygon	Site/Stn #	Age
413	8	117
413	9	111
413	10	118
413	11	138
413	12	149
420	1	161
420	2	112
420	3	110
420	4	104
420	5	126
420	6	112
420	7	96
420	8	63
420	9	89
420	10	42
420	11	95
420	12	113
455	1	112
455	2	102
455	3	138
455	4	79
455	5	155
455	6	155
455	7	127
455	8	147
455	9	167
455	10	149
455	11	121
455	12	79
544	1	117
544	2	90
544	3	41
544	4	56
544	5	38
544	6	92
544	7	44
544	8	38
544	9	121
544	10	32
544	11	43
544	12	61
563	1	126
563	2	132
563	3	119
563	4	132
563	5	126
563	6	105
563	7	133
563	8	141
563	9	141
563	10	153

Polygon	Site/Stn #	Age	Polygon	Site/Stn #	Age
563	11	126	1485	3	ND
563	12	134	1485	4	poor sample - no accurate count
590	1	77	1485	5	83
590	2	129	1485	6	216
590	3	107	1485	7	114
590	4	112	1485	8	49
590	5	94	1485	9	ND
590	6	111	1485	10	67
590	7	108	1485	11	176
590	8	91	1485	12	ND
590	9	112	1485	13	ND
590	10	92	1551	1	94
590	11	92	1551	2	87
590	12	93	1551	3	75
637	1	ND	1551	4	84
637	2	62	1551	5	73
637	3	73	1551	6	72
637	4	31	1551	7	89
637	5	43	1551	8	98
637	6	63	1551	9	75
637	7	82	1551	10	86
637	8	64	1551	11	86
637	9	121	1551	12	82
637	10	121	1567	1	103
1124	1	64	1567	2	77
1124	2	55	1567	3	106
1124	3	84	1567	4	86
1124	4	66	1567	5	84
1124	5	104	1567	6	58
1124	6	99	1567	7	86
1124	7	51	1567	8	88
1124	8	73	1567	9	85
1124	9	80	1567	10	108
1124	10	266	1567	11	72
1124	11	98	1567	12	91
1124	12	81	1567	13	68
1124	13	71	1632	1	114
1326	1	123	1632	2	131
1326	2	84	1632	3	101
1326	3	100	1632	4	136
1326	4	103	1632	5	152
1326	5	75	1632	6	139
1326	6	38	1632	7	108
1326	7	106	1632	8	105
1326	8	129	1632	9	185
1326	9	111	1632	10	110
1326	10	63	1632	11	139
1326	11	143	1632	12	92
1326	12	83	1648	1	93
1485	1	ND	1648	2	71
1485	2	91	1648	3	88

Polygon	Site/Stn #	Age	Polygon	Site/Stn #	Age
1648	4	105	1848	6	141
1648	5	95	1848	7	70
1648	6	91	1848	8	80
1648	7	96	1848	9	68
1648	8	87	1848	10	81
1648	9	88	1848	11	104
1648	10	94	1848	12	109
1648	11	78	1888	1	83
1648	12	105	1888	2	82
1648	13	ND	1888	3	86
1691	1	46	1888	4	83
1691	2	62	1888	5	101
1691	3	84	1888	6	82
1691	4	92	1888	7	97
1691	5	88	1888	8	80
1691	6	89	1888	9	127
1691	7	79	1888	10	78
1691	8	79	1888	11	89
1691	9	74	1888	12	82
1691	10	48	1898	1	101
1691	11	88	1898	2	127
1691	12	ND	1898	3	129
1783	1	53	1898	4	126
1783	2	58	1898	5	79
1783	3	poor sample - no accurate count	1898	6	154
1783	4	43	1898	7	147
1783	5	80	1898	8	164
1783	6	58	1898	9	142
1783	7	61	1898	10	63
1783	8	67	1898	11	92
1783	9	115	1898	12	87
1783	10	56	1898	13	138
1783	11	40	1959	1	57
1783	12	ND	1959	2	117
1803	1	131	1959	3	118
1803	2	95	1959	4	65
1803	3	95	1959	5	55
1803	4	119	1959	6	65
1803	5	97	1959	7	54
1803	6	103	1959	8	162
1803	7	85	1959	9	113
1803	8	79	1959	10	53
1803	9	101	1959	11	ND
1803	10	91	1959	12	127
1803	11	141	2041	1	116
1803	12	81	2041	2	131
1848	1	71	2041	3	43
1848	2	68	2041	4	41
1848	3	68	2041	5	48
1848	4	143	2041	6	125
1848	5	88	2041	7	138

Polygon	Site/Stn #	Age
2041	8	ND
2041	9	89
2041	10	44
2041	11	128
2041	12	36
2064	1	59
2064	2	59
2064	3	60
2064	4	ND
2064	5	ND
2064	6	ND
2064	7	ND
2064	8	48
2064	9	208
2064	10	50
2064	11	51
2064	12	58
2109	1	113
2109	2	96
2109	3	85
2109	4	94
2109	5	115
2109	6	207
2109	7	222
2109	8	102
2109	9	243
2109	10	84
2109	11	134
2109	12	229
2113	1	52
2113	2	216
2113	3	83
2113	4	41
2113	5	52
2113	6	58
2113	7	67
2113	8	61
2113	9	59
2113	10	67
2113	11	160
2113	12	286
2473	1	68
2473	2	81
2473	3	73
2473	4	59
2473	5	59
2473	6	112
2473	7	62
2473	8	64
2473	9	135
2473	10	62

Polygon	Site/Stn #	Age
2473	11	156
2473	12	189
2568	1	70
2568	2	61
2568	3	98
2568	4	68
2568	5	128
2568	6	43
2568	7	81
2568	8	54
2568	9	58
2568	10	90
2568	11	49
2568	12	61
2568	13	78
2916	1	151
2916	2	144
2916	3	121
2916	4	147
2916	5	112
2916	6	139
2916	7	126
2916	8	129
2916	9	156
2916	10	95
2916	11	124
2916	12	144