Nulhegan Band of the Coosuk - Abenaki Nation - Chief Don Stevens License # 19768

Completed by: Niels Rinehart

# STATE OF VERMONT AGENCY OF NATURAL RESOURCES DEPARTMENT OF FORESTS, PARKS AND RECREATION

# **LICENSE**

This license is made by and between the State of Vermont, hereinafter called "State," by its Department of Forests, Parks and Recreation pursuant to 10 V.S.A. § 2606(b), and Nulhegan Band of the Coosuk - Abenaki Nation - Chief Don Stevens, 156 Bacon Drive, Shelburne, Vermont 05482, chiefdonstevens@comcast.net, (802) 985-2465, hereinafter called "Licensee." Citizens of the four state recognized Abenaki tribes, hereinafter called "Sub-Licensees", are also covered for licensed activities.

It is mutually agreed by and between the parties, in consideration of, and under, the terms and conditions set forth below that the State grants Licensee and Sub-Licensees the use of the licensed parcels for the sole purpose of the licensed activity as both are described below.

Licensee is authorized to use land on State Parks and State Forests throughout the State of Vermont, for the sole purpose of collecting plants and plant parts for use as traditional medicines, food, artist materials, and crafts. Collection will be limited to picking of berries, nuts, fungi, and other wild edibles, except ginseng, consistent with Agency of Natural Resources Policy on the Uses of State Lands. This authorization does not allow collected materials to be used for commercial activities.

The terms, conditions, and covenants agreed to are:

- 1. TERM: The term of this license shall commence on May 1, 2022 December 31, 2032.
- 2. <u>FEE</u>: The Licensee covenants and agrees with the State that Licensee shall pay or cause to be paid to the State, the sum of \$50.00 for the privileges specified herein.
- 3. <u>SPECIAL TERMS AND CONDITIONS</u>: This license shall be subject to the following terms and conditions:
  - A. Licensee and its agents are permitted to collect any edible plants or plant parts pursuant to the Agency of Natural Resources Policy on the Uses of State Lands (11/14/2008), allowing for non-commercial picking of berries, nuts, fungi and other wild edibles except ginseng.
  - B. Collections for medicines or crafts shall be limited to Appendix 1 and Appendix 2. Any changes to this list shall be made only once each year and requests for additions to the Appendices shall be made on or as close as possible to January 1.
  - C. Licensee shall not collect any state or federally listed rare, threatened, or endangered species, ginseng, or bark from any species of green or white ash (Fraxinus spp.). Collection of black ash seed, bark, or wood (including the submerged storage of ash materials on FPR lands) will require written permission and agreement to conditions as described in Appendix 2. It is the responsibility of the collector to properly identify plants and to avoid rare, threatened, and endangered species. See Appendix 3 for a list of prohibited plants. This list is not an exhaustive list of prohibited plants in Vermont. It is a list of plants commonly collected by the Abenaki tribe. Two suggested books to help with Vermont plant identification are listed below.
    - 1. Gilman, A.V., 2015. New flora of Vermont. Bronx: New York Botanical Garden Press.
    - 2. Haines, A., 2011. Flora Novae Angliae. New England Wildflower Society & Yale University Press, New Haven, CT.

- D. Licensee and its agents shall park so as not to block roads or in front of gates, or interfere with the others using State land, or vehicles used by persons engaged in said activities.
- E. In fee controlled areas, fees will not be charged if collecting takes place in the park's off season. Fees for day use or camping can be waived in exchange for services like interpretive programming at a scale which the State feels is a reasonable exchange for the fees being offset. Arrangements that result in an exchange must be made with park staff in advance of collecting. Please contact Rob Peterson (robert.peterson@vermont.gov) to propose an exchange.
- 4. <u>MAINTENANCE</u>: The premises being used shall be maintained in a condition satisfactory to the State, including, but not limited to, removal of any trash or rubbish resulting from licensed activities. Licensee shall remove any and all equipment and personal property, which may have been placed upon the premises promptly upon termination of the license and shall clean and restore the site to the satisfaction of the State.
- 5. <u>NON-EXCLUSIVITY</u>: This license shall not be exclusive. The State reserves the right to use, or allow others to use, any part of the licensed area provided such use does not unreasonably interfere with the privileges hereby authorized to Licensee.
- 6. <u>LIABILITY</u>: The State assumes no responsibility or liability for any injury or harm that may occur as a result of the improper collection or ingestion of poisonous or harmful berries, nuts, fungi, invasive or wild plants.
- 7. <u>ASSIGNMENT</u>: This license is issued to the Licensee herein named, and is not assignable without prior written permission of the State.
- 8. <u>PERMITS, RULES, AND REGULATIONS</u>: The Licensee shall obtain and maintain, at its own expense, all permits or licenses for the licensed activity and the Licensee shall not violate the terms or conditions of any of those permits or licenses.
- 9. <u>SUITABILITY OF PREMISES</u>: Acceptance of this license by Licensee shall be prima fascia evidence that Licensee accepts the suitability of the premises for its purposes, and the use thereof by Licensee shall attest such suitability.
- 10. <u>BUILDINGS AND STRUCTURES</u>: No buildings or structures shall be erected upon the premises, other than those specifically authorized.
- 11. <u>HERBICIDES</u>: Licensee shall not use herbicides, other pesticides, growth inhibitors, or other toxic chemicals on the licensed parcel, unless approved by the department, consistent with Agency policy regarding Uses of Pesticides on ANR Lands.
- 12. <u>VEGETATION</u>: No trees or other vegetation may be removed from the site without prior approval from the State except as expressly provided herein.
- 13. TAXES: Certification under 32 V.S.A. § 3113 The Licensee hereby certifies, under the pains and penalties of perjury, that Licensee is in good standing with respect to, or in full compliance with a plan to pay, any and all taxes due the State of Vermont as of the date the Licensee signs this contract, and to affirm, in accordance with 15 V.S.A. § 795 (where applicable) that all obligations in regard to child support are in good standing or that there is compliance with a payment plan approved by the Vermont Office of Child Support Services.

- 14. <u>TERMINATION</u>: The State reserves the right to cancel this license at any time if the Licensee does not carry out conditions above. In addition, the State may without cause cancel this license, or alter the area upon ninety (90) days written notice to the Licensee. Effort by both parties to this license will be made to resolve issues before a decision is made to cancel the license. If the State cancels this license it shall make a financial adjustment to the Licensee by mutual agreement, but in no event to exceed any payment due the State in the particular license period that such cancellation may occur.
- 15. <u>PREVIOUS AGREEMENTS</u>: This writing supersedes and takes precedence over all other agreements written or oral, regarding the subject matter of this license and it is intended by the parties hereto as the final, complete, and exclusive expression of their agreement.

The State of Vermont, Department of Forests, Parks & Recreation is prohibited by 10 V.S.A. § 2606(b) from granting leases without prior approval of the General Assembly. Such approval has not been granted as of the date hereof. It is understood, therefore, that notwithstanding the terms and conditions set forth herein relating to the term or period of time, that unless or until approval of the Governor is granted, this instrument shall be construed as a license only, removable at the pleasure of the State at any time. Licensee accepts this instrument subject to this provision, and all expenditures or other actions or steps taken by Licensee in reliance on or expectation of the continuity of occupancy shall be entirely at his own risk.

STATE OF VERMONT DEPARTMENT OF FORESTS, PARKS & RECREATION

DocuSigned by:	
Becca Washburn	5/2/2022
Rebecca Washburn, Director of	Date
Lands Administration & Recreation	
LICENSEE	
DocuSigned by:	
Chief Don Stevens	5/3/2022
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Chief Don Stevens	Date
Nulhegan band of the Coosuk, Abenaki Nation	

### **APPENDIX 1**

Wild items approved for collection for medicines and crafts on Department of Forests, Parks & Recreation lands. For collection of wood, bark, or roots, see Appendix 2.

**Alder** (Alnus incana) – *Wdopi*: Wood is used to smoke fish. A tea made from the bark is used for diphtheria. The bark can be burnt and inhaled for rheumatism. NO collection of Alnus viridus. See Appendix 2 for approvals of wood and bark collection.

**American Beech Tree** (Fagus grandifolia) – *Wajoimezi*: Nuts can be eaten raw or cooked. A tea made from the leaves is used as a wash and poultice to treat frostbite, burns and poison ivy rash. A tea made from the bark is used for lung ailments. **Beech** – Vitamin Drink

**American Chestnut** (Castanea dentata) – *W8bimezi*: Nuts can be eaten raw or cooked. The roasted nut can be used as a coffee substitute. A warm water infusion of the leaves is used to calm the respiratory nerves and promote expectoration.

**American Holly** (Ilex verticillata) - The berries are laxative, emetic and diuretic. They are used in the treatment of children's diarrhea, colic and indigestion. A tea made from the leaves has been used as a treatment for measles, colds.

**American Sycamore** (Platanus occidentalis) – *Pabalakw*: A tea is made from the inner bark for dysentery, coughs, colds and hemorrhages.

Apple Buds (Malus spp.) - Eye wash

**Arrow Head Rattlebox** (Crotalaria sagittalis) – Collection prohibited. Very rare and legally protected as state threatened.

**Balsam Fir** (Abies balsamea) – Kokokha8wk: A tea made from the leaves is used for coughs, colds and fevers. The tea can also be used as a scalp wash for dandruff. The leaves are harvested in the spring and dried. The resin is an antiseptic and healing agent and is used for frostbite.

**Basswood** (Tilia American) – *Wigebimezi*: A tea made from the inner bark is used for burns. The inner bark is very fibrous and is used for weaving, making rope and for sutures for wounds.

**Beaked Hazelnut** (Corylus cornuta) – *Pakanalawimen*: The seed can be eaten raw or cooked. An infusion of the branches and leaves is used for heart complaints, rheumatism and intestinal disorders. A blue dye is obtained from the root and inner bark.

**Bear Berry** (Arctostaphylos uva-uris)- Smudge. Limit amount of collection to no more than 10% of the plant or its parts in a given area.

**Blackberry** (Rubus allegheniensis) – *Pezagwdamenakwam*: The vine is combined with wild cherry bark to cure dysentery.

**Black Ash** (Fraxinus nigra) – *Mkazawi Maahlakws*: Seed collection only for the purposes of propagation of tree. Collection limited to 10% of seeds in a given area.

**Black Birch** (Betula lenta) – *Mkazamawozi*: The inner bark can be cooked or dried and ground into a powder which is used as a thickener in soups. A tea is made from the inner bark and used for fevers, stomach aches and lung ailments. A tea from the twigs is used for fevers.

**Black Oak** (Quercus velutina) – *Anaskemezi*: Acorns can be eaten cooked. Tea from the inner bark is used for colds, hoarseness, indigestion and asthma.

Black Poplar (Populus nigra) – Vitimain D & C.

**Black Raspberry** (Rubus occidentalis) – *Mkaza* Zegweskimen: The fruit can be eaten. The root can be chewed for coughs and toothaches. A tea made from the leaves is used as a wash for sores, ulcers and boils.

**Black Root** (Veronicastrum virginicum)– Erectile dysfunction - Collection prohibited. Very rare and legally protected as state endangered.

**Black Spruce** (Picea mariana) – *Mskak*: A tea made from the bark is used for colds and coughs. A poultice from the inner bark is used to reduce inflammation.

Black Walnut (Juglans nigra) – *Pagimezi*: The nuts can be harvested and eaten for their distinctive flavor. Three slender branches are roasted in the open fire. The bark from each is then removed by peeling from the tip end and tied in separate bundles. A strong tea is made by boiling these three bundles of bark together, and large draughts are taken occasionally. To remove bile from the intestines, the treatment is continued for two days. The leaves are scattered about the house to dispel fleas while the sap is a good application for any inflammation. Juice from the green hull of the fruit is rubbed over the infected area to cure ringworm. A tea made from the leaves is an astringent. An infusion of the bark is used to treat diarrhea and also to stop the production of milk. Can also be used as a dye.

**Blueberry** (Vaccinium angustifolium) – *Zatamozi*: Fruit can be eaten. A tea made from the leaves is used as a blood purifier, for infant colic, rheumatism and to induce labor.

**Blue Cohosh** (Caulophyllum thalictroides) – *Wl8wi*: The roasted seed can be used as a coffee substitute. The root is used for kidney disorders, to facilitate child birth and to make a general tonic. The roots are harvested in autumn and dried.

**Blue Flag** (Iris versicolor) – *Kakskim8kiso*: A tea made from the dried root is used for rheumatism, scrofula, and disorders of the liver and kidneys and has a laxative effect. It is used externally on burns, wounds and swelling. The roots were boiled in water and then mashed to make a poultice which was used to relieve the pain and swelling associated with sores and bruises. The roots are harvested in late summer and early autumn.

**Bloodroot** (Sanguinaria canadensis) – *Pagakanihl8k* - An infusion of the dried root is used for cough and to purify the blood. The sap of the root is mixed with animal fat used for red face paint. The root can be harvested in autumn and dried.

**Boneset Thoroughwort** (Eupatorium perfoliatum) - *M8l8dagwinebzon*: The root and the leaves are infused as a treatment to relieve cold symptoms for chills and fever, acute bronchitis as well as having a laxative effect.

Box Elder (Acer negundo) – Pilkimezi: A tea made from the inner bark is used as an emetic.

**Bunchberry** (Cornus canadensis) – *Batkilawinbizon* - pain in the side medicine: Fruit can be eaten raw or cooked. A tea made from the leaves is used for aches and pains, kidney and lung ailments, coughs and fevers.

Burdock (Arctium minus) - Leaf/ Root - Leaf for skin rashes and root for eating

**Butternut** (Juglans cinerea) – Bark collection prohibited. Collection of nuts is strongly discouraged because the species is uncommon and numbers are declining. If collected, do so sparingly.

Common Milkweed (Asclepias syriaca) - *Azibiz*: There are several other rare and uncommon milkweeds. The common milkweed (Asclepias syriaca) found in many old fields is abundant and would be ok to collect. NO collection of butterfly milkweed (Asclepias tuberos). The raw root can be eaten to treat bronchial and pulmonary conditions. The dried root is also used as a remedy for pleurisy and rheumatism. It is also administered to women following childbirth. The flower buds can be cooked and eaten and taste similar to peas. In hot weather the flowers produce so much nectar that it crystallises out into small lumps which can be eaten and is very sweet.

**Canadian Yew** (Taxus canadensis) – *Sagask8dakw*: Fruit can be eaten. A small amount of leaves can be used to make a tea for rheumatism, fevers, influenza and to bring out clots and alleviate afterbirth pain in women.

**Cardinal Flower** (Lobelia cardinalis) – *Mkwatawa*: A poultice of the crushed leaves is used for headaches, an infusion of the leaves is used for colds and fever and a tea made from the root is used for typhoid.

Catnip (Nepeta cataria) - Reduces fever

Cattail (Typha latifolia) – *Pakwaaskw*: The leaves are diuretic, the pollen is astringent. The dried pollen can be used as an anticoagulant and if roasted with charcoal becomes a haemostatic. Medicine is made from the root to dissolve kidney stones, for painful menstruation and post-partum pains. The roots are pounded into a jelly-like consistency and applied as a poultice to wounds, cuts, boils, sores, carbuncles, inflammations, burns and scalds. The flowers are used for abdominal pain, amenorrhoea, cystitis, dysuria, metrorrhagia and vaginitis. The young flower heads are eaten as a treatment for diarrhea. The seed down has been used as a dressing on burns and scalds. The down can be used on infants to prevent chafing and as a pillow/mattress stuffing. The roots and young shoots can be eaten raw or cooked.

**Cedar** (Thuja occidentalis) – Smudge. Twigs or branches up to 2 inches diameter may be harvested from 1 tree per person per year. Bark as noted in Appendix 2.

**Chaga Mushroom** (Inonotus obliquus) — Traditionally grated into a fine powder and used to brew a beverage similar to tea or coffee, which is used to boost the immune system, fight inflammation and lower blood sugar.

**Choke Cherry** (Prunus virginiana) – *Abimenakwam*: A tea from the bark is used for diarrhea.

Climbing American Bittersweet (Celastrus scandens) – Collection prohibited. Uncommon species that can easily be confused with non-native species (Celastrus orbicutaltus)

**Colt's Foot** (Tussalago farfara)- Coughing. Another plant sometimes called "colt's foot" is Petasites frigidus, which is rare and legally protected as state threatened. Collection prohibited of P. frigidus.

**Common Plantain** (Plantago major) - *8wdiibagw* – white man's foot: Young leaves can be eaten raw or cooked. A tea from the leaves is used for diarrhea, gastritis, peptic ulcers, irritable bowel syndrome, hemorrhoids, bronchitis, sinusitis, asthma and hay fever. The heated leaves are used as a wet dressing for wound and swelling and is an effective treatment for bleeding.

Corn (Zea mays) – Skamon: Seed can be eaten raw or cooked. The dried cobs (Midgwakwam) are boiled and the liquid used as a rinse for poison ivy. The husks (Kwalaskw) and roots are used for strangury, dysuria and gravel. The silk(Wgizsolkw8n) is used for diabetes mellitus, cystitis, gonorrhea and gout. The silks are harvested before pollination and used fresh.

**Creeping Snowberry** (Gaultheria hispidula) – *Kawasanipakw*: A tea made from the leaves is used for people who have over eaten.

**Dandelion** (Taraxacum officinale) — The young leaves can be eaten raw or cooked. The root can be boiled and eaten or dried and ground to be used in a hot drink similar to coffee. A tea from the leave or root is used for urinary disorders, gallstones, jaundice, cirrhosis, gout and eczema. The roots can be harvested in autumn and the leaves in the spring when the plant is in flower.

**Dogwood** (Cornus spp) – The inner bark was boiled and the tea drunk to reduce fevers and to restore a lost voice. Collection prohibited of flowering dogwood (Cornus florida). It is very rare and legally protected as state threatened.

**Dwarf Honeysuckle** (Dievilla lonicera) – Pigw8ganizal: The leaves are diuretic. The root is a laxative. An infusion from the bark has been used to increase milk flow in nursing mothers.

**Dwarf Sumac** (Rhus copallina) – Zal8nakwam: Roots are pounded and applied as poultice for sores and skin eruptions. An infusion of the leaves is used to cleanse and purify skin eruptions. To treat venereal disease an infusion of the roots is taken. The berries are useful in making a mouth wash. A tea made from the bark has been drunk to stimulate milk flow in nursing mothers. A decoction of the bark has been used as a wash for blisters and sunburn blisters.

**Eastern Cottonwood** (Populus deltoides) – *Wawapbagw*: A tea from the inner bark is used for scurvy and to relieve the pain of menstrual cramps.

**Eastern Hemlock** (Tsuga canadensis) – *Alnizedi*: The inner bark can be eaten raw or cooked and is harvested in the spring and dried then ground into a powder. A poultice of the bark is used to cleanse and tighten bleeding wounds. An infusion of the bark is used for thrush and as a mouthwash and gargle for gingivitis and sore throats. A tea made from the leafy twigs is used for dysentery, kidney ailments, colds and rheumatism.

**Elder** (Sambucus canadensis) – *Saskib*: The leaves and stems act as a blood purifier and are also used in the treatment of jaundice. From the dried flower, a tea is made for colic in infants. The bark scrapings are used in making a poultice for sores, swellings, and wounds. A tea made from the root bark is used to promote labor in childbirth and in treating headaches, kidney problems and mucous congestion. **Elderberry** (Sambucus spp.) – Food.

**Elm** (Ulmus americana) – Anibi: A tea from the inner bark is used for colds, sever coughs, bleeding from the lungs, influenza and diarrhea. The red inner bark can also be used to make a coffee substitute.

Evening Primrose (Oenothera biennis) - Mind Tonic.

**False Pennyroyal** (Hedeoma pulegioides) – A tea is made from the leaves to relieve stomach pains, as a cold remedy, cough medicine, fever reducer, stimulant and toothache remedy. The plants are harvested when flowering and can be used fresh or dried.

**Feathery Solomon's Seal** (Maianthemum racemosum) – *Salem8n*: The fruit is edible. The root is used to stop bleeding.

**Fiddle Head Ferns** (Matteuccia struthiopteris) – *L8baktaiganimdup Masozi*: The young fronds can be collected in spring and eaten. A decoction of the leaf stalk base from sterile fronds has been taken in the treatment of back pain and also to help speed up the expulsion of the afterbirth.

**Fireweed** (Epilobium angustifolium) – *Pabazinebizon*: The leaves and young shoots can be eaten raw or cooked. A tea from the leaves is used for coughs, dysentery and abdominal cramps. A poultice from the peeled roots is used for burns, skin sores, boils and swelling.

**Fox Grape** (Vitis vulpine or Vitis labrusca) -M8l8gwimen: An infusion made from the leaves is used in the treatment of diarrhea, hepatitis, stomach aches, fevers, headaches and thrush. Externally, the leaves are used as a poultice and applied to sore breasts, rheumatic joints and headaches. The wilted leaves have been applied as a poultice to the breasts to draw away

soreness after the birth of a child. An infusion of the bark has been used to treat urinary complaints. The leaves are prepared by removing the mid-rib and rubbing them slightly between the hands.

**Frost Weed** (Helianthemum canadense) – Collection prohibited. Very rare and legally protected as state threatened.

**Ginseng** (Panax quinquefolius) – Collection prohibited. Very rare and legally protected by state and federal rules.

**Goldenrod** (Solidago juncea) – The green leaves are chewed or infused to cure nausea and diarrhea. Also used to reduce fever.

**Goldenseal** (Hydrastis canadensis) – Collection prohibited. Very rare and legally protected as state threatened.

**Goldthread** (Coptis trifolia) – *Lasawian* – Little Yellow Root: An infusion of leaves is used as mouth wash for infants with thrush. The stems are chewed for canker sores in the mouth. A yellow dye is obtained from the leaves and stems.

**Gooseberry** (Ribes cynosbati) – K8kwakwimen: The fruit can be eaten raw or cooked. The root bark has been used for the uterine problems caused by women having too many pregnancies.

Grey Moss (old man's beard lichen) (Usnea spp.) – Mental Clarity

**Ground Cherry** (Physalis longifolia) – Collection prohibited. Very rare and easily confused with other common species.

**Ground Nut** (Apios Americana) – *Apen*: The tuber can be eaten raw or cooked. The nuts are boiled and used as a plaster on the flesh around healing wounds.

**Hardhack** (Spiraea tomentosa) – *Tiibagol*: An infusion of the leaves is used for dysentery.

**Heal-All** (Prunella Vulgaris) — The plant top is used to make a tea to reduce fever as well as a body wash used to reduce fever. It can be used fresh or dried, for drying it is best harvested in mid-summer.

Hickory (Carya ovata) - Nuts can be eaten raw or cooked.

**Highbush Blueberry** (Vaccinium corymbosum) – *Awasoswisata* - Bearberry: Fruit can be eaten fresh or dried. A tea is made from the leaves and dried fruit.

**Highbush Cranberry** (Viburnum opulus) – *Nibimenakwam*: Fruit can be eaten raw or cooked. A tea made from the berries is used for mumps.

Horsemint (Monarda punctata) - Collection prohibited. Very rare and legally protected as state threatened.

**Huckleberry** (Gaylussacia baccata) - *Awasosewizata*: Fruit can be eaten. An infusion of the leaves or bark are used for dysentery and Bright's disease.

**Indian Cucumber Root** (Medeola virginiana) – *Askitamegiz*: The root can be eaten raw or cooked. The root is a diuretic and is used for dropsy.

**Indian Pipe** (Monotropa uniflora) – *Odam8ganiz*: The whole plant can be cooked and eaten, it has a taste similar to asparagus. The root is steeped in a small amount of water and is used as quinine for pain caused by colds. The crushed plant can be rubbed on bunions and warts.

**Jack-in-the-Pulpit** (Arisaema triphyllum) – *Tkin8ganiz*: Also known as the Indian Turnip. The dried root is steeped and the liquid is used as a linament for pain. The root is harvested in early spring and dried.

**Jerusalem Artichokes** (Helianthus tuberosus) – Root used for food. Note: harsh sunflower is a related species that can be cause some confusion. It is a threatened species and collection is prohibited. However, this protected plant does not produce a tuber, which is the desired food for this plant.

Juniper (Juniperus communis) - The fruit are used to make a tea that is used as a wash for the hair.

**Labrador Tea** (Rhododendron groenlandicum) – *Az8bakwiz*: A tea from the leaves is used for headaches, asthma, colds and stomach aches. The tea can be used as a wash for the scalp to get rid of dandruff. **Lily of the Valley** (Maianthemum canadense) – *8bijibad Peskwasaw8n*: A tea made from the plant is used for headaces.

**Lousewort** (Pedicularis canadensis) – A tea made from the root is used for stomach aches, ulcers, diarrhea and anemia. An infusion of the leaves is used to produce an abortion.

**Maple** (Acer saccharum) – *Senomozi*: The sap is edible and used to make syrup and sugar. Inner bark from the south side of the tree is used to make a cough remedy. The inner bark is made into a tea that is used as a blood tonic, diuretic, expectorant used for diarrhea.

May Apple (Podophyllum peltatum) – Collection prohibited. Very rare.

**Mint** (Mentha spp.) – Medicine Flavoring. Note: use caution when collecting as there are a number of native mints that are rare. **Wild Mint** (Mentha canadensis) – *Kchi Pseske*: A tea from the leaves is used for stomach issues.

**Mountain Ash** (Sorbus americana) – *Wajoimahalakws*: The fruit can be eaten raw or cooked. The bark is boiled and used as a drink to induce vomiting.

**Mullein** (Verbascum thapsus) - *Madah8dowi odam8* - devil's tobacco: A tea from the dried leaves is used for chest complaints and diarrhea. Any preparation made from the leaves needs to be carefully strained in order to remove the small hairs which can be an irritant. The plant is harvested when in flower and dried.

Mushrooms - food

Northern Oak Fern (Gymnocarpium dryopteris) – *Anaskemezii Masozi*: The leaves are crushed and rubbed on insect bites.

**Northern White Cedar** (Thuja occidentalis) – M8l8dagw: The pith of young shoots can be cooked and added to soups. A tea made from the leaves is used for bronchitis, colds, headaches. The leaves are used in steam baths for rheumatism and arthritis. A tincture of the leaves is used for warts, piles, bed sores and fungal invections.

**Partridge Berry** (Mitchella repens) – *Pakeswimen*: A tea is made from the fresh or dried leaves for suppressed menstruation, as well as insomnia, rheumatic pain and fluid retention. It was used in the weeks preceding childbirth in order to promote easy delivery.

**Peach** (Prunus persica) – *Piches*: The leaves are infused to expel pin worms, to stop vomiting in children, gastritis, whooping cough, coughs and bronchitis. A small quantity is sweetened and is drunk occasionally until relief is felt. The leaves are harvested in June or July and then dried.

Pearly Everlasting (Anaphalis margaritacea) - Smudge

**Phragmite Reeds** (Phragmites australis) – Collection prohibited. Movement should be prohibited and regulated by noxious weeds quarantine.

**Pig Weed** (Amaranthus retroflexus) – The young leaves and seeds can be eaten raw or cooked. An infusion of the leaves is used to relieve hoarseness. A tea made from the leaves is sued for profuse menstruation, intestinal bleeding and diarrhea.

**Pin Cherry** (Prunus pennsylvanica) – *Maskwazimen*: The fruit can be eaten raw or cooked. A poultice is made from the wood is used for boils and abscesses. See Appendix 2 for approvals of wood and bark collection.

Pin Oak (Quercus palustris) - Collection prohibited. Very rare and legally protected as state threatened.

**Pipsissewa** (Chimaphila umbellata) — Known to have antifungal and antioxidant properties. The plant is steeped and the liquid is applied to blisters. It purifies the blood and tends to aid in removing mucus from the lungs. An infusion is used in the treatment of various problems related to the urinary system. The plant is harvested when in flower, and the leaves on their own can be harvested during the growing season.

**Pitcher Plant** (Sarracenia purpurea) – *Pokwjinskwas*: An infusion of the leaves was used for smallpox. An infusion of the dried leaves is used for fevers and shakiness.

**Pokeweed** (Phytolacca decandra) - *Pelazimen*: The root of this plant is combined with the bark of sarsaparilla and grape to make a remedy for rheumatism and other auto-immune diseases. It acts as a stimulant and blood purifier. In preparing the medicine, the root of the poke is first thoroughly roasted and then crushed. To avoid nausea, a small dose is customary.

**Prickley Ash** (Zanthoxylum americanum) – Kag8wakw: Inner bark is steeped as medicine for heart trouble, arthritic and rheumatic conditions, digestive problems and leg ulcers. Liquid is taken in small doses administered in alternate three day periods.

Pollen - Flavoring

**Pumpkin/Squash** (Cucurbita pepo) – *Wasawa*: The fruit and seed are edible raw or cooked. The leaves can be applied to burns.

**Purplestem Angelica** (Angelica atropurpurea) – A tea made from the leave or root is used for stomach disorders, fevers, headaches and pneumonia. Seeds sometimes are mixed with smoking tobacco.

**Quaking Aspen** (Populus tremuloides) – *Wawabibagw*: Inner bark can be eaten raw or cooked. An infusion of the bark is used for rheumatism, arthritis, gout, lower back pains, urinary complaints, digestive disorders, anorexia and to reduce fevers.

Queen Anne's Lace (Daucus carota) - Smudge

**Ragweed** (Ambrosia artemisiifolia) – Plant used in making a poultice to apply as a preventative for blood poison. The root of the plant is used to make a tea that works as a laxative. The juice from crushed leaves can be applied to insect bites or poison ivy rashes to soothe irritation.

Raspberry Leaves (Rubus spp.)- Goodwill, mood lifter

Rattlesnake Fern (Botrychium virginianum) – *Masasizikwa Masozi*: Collection prohibited. Uncommon on our WMAs.

**Red Currant** (Ribes triste) – *Pessimen*: A tea from the stems, without the bark, has been used as a wash for sore eyes.

**Red Oak** (Quercus rubra) – *Anaskemezi*: Acorns can be eaten cooked. Bark is steeped to make a tea for sever cough, hoarsness and indegestion.

**Red Osier Dogwood** aka Red Willow (Cornus sericea) – *Makwakwsek*: The fruit can be eaten raw or cooked. The bark was used as a tonic for diarrhea, fevers and colds. A poultice can be made an applied to the eyes for soreness and swelling.

**Red Raspberry** (Rubus idaeus) – *Zegweskimen*: Fruit can be eaten. A tea from the leaves is used for diarrhea, to relieve menstrual cramps and to strengthen the uterus of pregnant women. The tea can be used as a gargle and mouth wash for tonsillitis, mouth sores and conjunctivitis. The leaves are harvested in summer and dried.

Red Spruce Tips (Picea rubens) – Anti-fungal

**Red Willow** (Salix spp.) – Menstrual Cramps, can be smoked in place of tobacco, used to make pipe stems.

**Rock Fern** (Polypodium virginianum) – *Senikokladabagol*: A tea from the leave is used for stomach pains, colds, coughs and sore throat.

Rose Hips (Rosa spp.) - Food

Sage Willow (Salix candida) - Collection prohibited. Uncommon species in VT.

Sarsaparilla (Aralia nudicaulis) – Sas8ksek: A poultice made from the crushed root and/or fruit can be sued as a poultice for rheumatism, sores, burns and skin problem. The root was combined with other plants and roots to make a spring tonic. The root is collected in late summer and autumn and dried. The bark of this plant is combined with root of pokeweed and bark of grape to make a remedy for rheumatism and other auto-immune diseases.

Sassafras (Sassafras albidum) - Collection prohibited. Uncommon species in VT.

Shelf Mushrooms - Smudge

Shin Leaf (Pyrola elliptica) – Collection prohibited. Uncommon species in VT.

**Skull-Cap** (Scutellaria galericulata) – The plant top is a stomach stimulant and a laxative. An infusion is used for throat infections. The plant is harvested in summer as it comes into flow and is dried for later use.

**Skunk Cabbage** (Symplocarpus foetidus) – Sieg8gwibagw – Skunk Plant: Is used for its expectorant and antispasmodic properties. A tea made from the root is useful in treating whooping cough, bronchitis and asthmatic conditions. The leaves are crushed and used as a poultice to allay pain. People suffering from epilepsy can roll up a small portion of the leaf and chew it. The rootstock is harvested in late autumn or early spring and dried for later use.

**Slippery Elm** (Ulmus rubra) – *Anibi*: Leaves and inner bark can be eaten raw or cooked. Inner bark can be dried and ground into a powder then used as a thickener for soups. A mucilaginous substance produced by chewing the inner bark is good for sore throats, indigestion, digestive irritation and lung irritations. The inner bark is harvested in spring from the main trunk and larger branches, it is then dried and ground to powder for later use.

**Snake Root** – (Sanicula spp) – Collection prohibited. Too many species are legally protected and can be confused with common species.

**Soap Stone/Chert** – Soap stone for making pipes and chert for flint knapping.

**Speckled Alder** (Alnus incana) – Wdopi: Twigs are steeped and the resulting liquid is used as a liniment for sprains and bruises, headaches and backaches.

**Spice Bush** (Lindera benzoin) – The young leave, twigs and fruit can be used to make a tea. The twigs are harvested when the plant is in flower. The dried fruit can be used as a substitute for all spice. An infusion of the leaves is used as a vermifuge. The fresh leaves can also be chewed as a vermifuge. The bark can be harvested anytime of the year and used fresh or dried.

**Spikenard** (Aralia racemosa) – *Pakwalosi*: An infusion from the dried root is used for tuberculosis, coughs, colds and lung diseases. A poultice from the roots is used on burns, swelling, wounds, boils sprained muscles and broken bones. The root is harvested in late cummer and autumn and dried.

Spruce Gum (Picea spp.) - Expectorant, used also for patching canoes

Spruce Roots (Picea spp.) – Used for rope lashings

**Staghorn Sumac** (Rhus typhina) – *Zal8nakwam*: An infusion is used in the treatment of diarrhoea, fevers, piles, general debility, uterine prolapse. Berries make a gargle for sore throat.

**St. John's Wort** (Hypericum perforatum) – Muscle relaxant Note: Collection prohibited of great St. John's-wort (Hypericum ascyron) as it is legally protected as an endangered species.

**Star-like False Solomon's Seal** (Maianthemum stellata) – *8pkweskak* – Joint Plant: A tea made from the root is used to treat stomach problems and to regulate menstrual disorders.

**Stinging Nettle** (Urtica dioica) - *Maz8nibagw*: The young leave can be cooked and eaten. A tea from the leaves is used as a cleansing tonic and blood purifier, for hay fever, arthritis and anemia. The fresh leaves are rubbed onto the skin for rheumatism.

**Strawberry** (Fragaria virginiana) – *Mskikoimins*: The fruit can be eaten. A tea made from the leaves is used as a nerve tonic. A tea made from the dried root is used for diarrhea, irregular menses, stomach and lung trouble.

**Striped Maple** (Acer pensylvanicum) - *Atkimosi*: A tea made from the inner bark is used for colds, coughs, bronchitis, kidney infections, gonorrhoea and the spitting of blood. A poultice steeped from the bark is used for swelling of the limbs.

**Summer Grape** (Vitis aestivalis) – *Mol8gwimen*: An infusion of the bark has been used to treat urinary complaints. A decoction of the leaves and stems is used for stomach aches, fevers and headaches. The wilted leaves have been applied as a poultice to the breasts to draw away soreness after the birth of a child.

Sumac Berries (Rhus spp.) – Vitamin C

Swamp Dewberry (Rubus hispidus) – Juice from the berries is administered for dysentery.

**Sweet Fern** (Comptonia peregrina) - *Masozi*: Plant is steeped in liquid applied to blisters and poinson ivy. The leaves are astringent, blood purifier, expectorant and tonic. A tea made from the leaves and flowering tops is used as a remedy for diarrhoea, headache, fevers, catarrh, vomiting of blood and rheumatism. The leaves have also been used as a poultice for toothaches and sprains. The leaves are harvested in early summer and dried for later use.

**Sweet Flag/Muskrat Root** (Acorus americanus) – Collect only where locally abundant. This species can be locally uncommon, so be conservative when collecting.

**Sweet Grass** (Anthoxanthum odoratum)- *Wali Mskiko*: A tea from the stems can be rubbed on for relief from rheumatic pain and used as a bath to calm pregnant women during childbirth. Additionally, the smoke can be used to ease nervous insomnia. The stem is also used in basketry.

**Tamarack** (Larix laricina) – P8ben8dagwezo: The young shoots can be eaten as emergency food. A tea made from the bark is used as a laxative, for jaundice, anemia, rheumatism and colds. A tea made from the leaves is used for piles and diarrhea. A tea made from the leaves and inner bark is used for coughs. The resin can be chewed for indigestion.

**Toothwort** (Dentaria diphylla) – Collection prohibited. Too many species are legally protected and can be confused with common species.

**Trailing Arbutus** (Epigaea repens) – *Anak8gan Pizagaiwi Mskikoimenal*: A tea is made from the leaves for urinary tract and blood problems.

**Turtle Head** (Chelone glabra) – *Tolba wdep*: Is used as a form of birth control. A tea is used for consumption, debility, diseases of the liver, gallbladder problems, gallstones, to relieve nausea and vomiting, intestinal colic and to expel worms

**Twisted Stalk** (Streptopus amplexifolius) – *Waniskip*: The berries and young shouts are edible. A tea is made for kidney trouble.

**Valerian** (Valeriana officinalis) – Collection prohibited. Valeriana officinalis is non-native and common, but closely resembles the native V. uliginosa which is very rare and legally protected as state-endangered.

**Violet** (Viola labradorica) – *Min8bowigek*: The leaves and flower buds are edible. A poultice from the leaves and roots are used on insect stings.

**Virginia Snakeroot** (Aristolochia macrophylla) – *Skogimezi*: A tonic is used for treating skin, circulatory and kidney disorders. The root can be chewed in very small doses or used as a weak tea to promote sweating and stimulate the appetite. The chewed/pounded root or crushed leaves were used for snakebites. The root is harvested in autumn and dried.

**Water Avens** (Geum rivale) - *Ahadebaga*: A tea from the root is used for dysentery, coughs and colds. The dried root also repels moths.

White Birch (Betula papyrifera) - Antacid, bark used for birch baskets, canoes

White Oak (Quercus alba) — Wachilmezi: Acorns can be eaten raw or cooked. Bark is a valuable substance used in compounding many remedies. A tea made from the bark is used for a severe cough and for bleeding piles. For sore throat a stronger liquid is used as a gargle, douche and to cleanse bruises and ulcers. The bark can be chewed as a treatment

for mouth sores. The bark is best harvested in the spring.

Wild Onions/Leeks (Allium tricoccum) – food. Wild leek (Allium tricoccum) is fine to collect in moderation (<10% of plants in any given area). Allium canadense is sometimes called Wild Onion or Wild Garlic and is very rare and legally protected as state-threatened. It should not be collected. Chives (*Allium schoenoprasum*) is also very rare and should not be collected.

White Pine (Pinus strobus) – Koa: The seed can be eaten raw or cooked. The amber sap can be used as chewing gum. A tea from the needles (Koaibagw) is used for sore throats, pulmonary/respiratory issues and urinary trouble. An infusion of the dried inner bark is used as a cough remedy. The sap or gum is applied to boils and abscesses to relieve pain.

**White Spruce** (Picea glauca) – *Mesazesos*: The young male catkins can be eaten raw or cooked and used as a flavoring in soups. The immature female cones can be eaten cooked. An infusion of the cones is used for urinary tract infections. A poultice from the inner bark is used on sores and cuts.

Wild (Black) Cherry (Prunus serotina) - Wekkwamin: The medicinal properties of this plant are destroyed by boiling, so the plant should only be allowed to steep in warm water. Bark is used as a remedy for diarrhea and cough, it is also combined with other roots and bark as a tonic. The fruit is sometimes used to make cough syrup. A tea made from the root bark or inner bark is used to ease pain in the early stages of labor. The bark is harvested in autumn and dried.

**Wild Ginger** (Asarum canadense) – *Skogadebakw* – Snakehead Plant: The root can be dried and eaten, best harvested in autumn but can be harvested year round. The root is used for chronic chest compaints, asthma, coughs, colds, painful bowels and stomach and convulsions. The fresh leaves are used as a poultice for wounds and inflammations.

Wild Indigo (Baptisia tinctoria) - Collection prohibited. Very rare in VT.

**Wild Plum** (Prunus Americana) – Collection prohibited. Very rare in VT and legally protected as state threatened.

Wild Rice (Zizania aquatica) - food

Wintergreen (Gaultheria procumbens) -P8b8kowagizak: A tea made from entire plant is taken for kidney disorders, as a cold remedy. The leaves and the oil are analgesic. It is also used simply as a tasty tea. An infusion of the leaves is used to relieve flatulence and colic. The plant, especially in the form of the essential oil, is most useful when applied externally in the treatment of acute cases of rheumatism, sciatica, myalgia, sprains, neuralgia and catarrh. The leaves can be gathered at any time from spring to early autumn, they are dried for use in infusions or distilled to produce the oil.

Witch Hazel (Hamamelis virginiana) – *Madawinnoipekodaigan*: The twigs and leaves are steeped to make a lotion for cuts, bruises, insect bites, varicose veins and hemorrhoids. Branches and twigs are harvested for the bark in spring and the leaves are harvested in summer and dried.

**Yarrow** (Achillea millefolium) – *Nahamainebizon* - Turkey Medicine: The plant is known to contain an alkaloid called achileine that enhances blood clotting. The leaves (*Nahamaibagw*) can be eaten raw or cooked and can be added to mixed salads, the leaves are best used when young. The fresh leaf can be applied direct to an aching tooth in order to relieve the pain. A tea is made from the dried leaves for disorders of the liver and kidneys. Combined with Sambucus nigra flowers (Elder) and Mentha piperita vulgaris (Peppermint) it is used

treating colds and influenza. The herb is harvested in the summer when in flower and can be dried for later use.

**Yellow Birch** (Betula alleghaniensis) – *Wins*: A tea made from the bark is used for diarrhea, rheumatism and as a blood purifier.

Yellow Lady Slipper (Cypripedium parviflorum) - Collection prohibited. Uncommon or rare in VT.

Yellow Oak (Quercus muehlenbergii) - Collection prohibited. Uncommon in VT.

**Yellow Pond Lilly** (Nuphar variegata) *Wiz8watawa* – Yellow Flower: The root can be eaten raw or cooked. A tea made from the roots is used for dysentery and diarrhea. A poultice made from the roots is used for swelling, boils, tumors and inflamed skin.

**NOTE:** - If there are additional species that the Licensee or its agents wish to collect, the Department shall review an amended list at the end of each calendar year.

## **APPENDIX 2**

# Stipulations for Collection of Bark, Roots, or Wood from Trees, Shrubs, or Vines

I. <u>No Restriction</u>

Alder (speckled –  $Alnus\ incana$ )

Box Elder

Beech < 10" diameter at breast height

Dogwood (any species except flowering dogwood, Cornus florida)

Elder (Sambucus canadensis)

Grape (fox Grape - Vitis labrusca, Vitis vulpine, or summer grape - Vitis aestivalis)

Huckleberry

Mountain ash

Prickly Ash

Quaking Aspen

Red Currant

Sarsaparilla

Slippery elm

Striped maple

Tamarack

White Pine

II. Limited Collection: Bark or Roots from only 1 (one) tree/shrub per person per year

Basswood

Black Cherry

Elm (American - Ulmus Americana)

Gooseberry

Hemlock (none south of VT Route 4 due to decline from woolly adelgid)

Pin Cherry

Red Oak

Sycamore

White Spruce; all other Spruce species roots only

White Oak

III. <u>Additional Written Permission Required:</u> An Individual Collector shall request and receive permission in writing to collect any of the species listed below. Collector shall contact Niels Rinehart (niels.rinehart@vermont.gov) at least 30 days in advance of planned collection, specify the property location, and number of trees to be collected or impacted from bark collection.

All Birch species

Black Ash

IV. Prohibited: Bark Collection Not Allowed

Ash (*Fraxinus* spp.) – green, or white

Black walnut

Butternut

Cedar

Honevsuckle

Spice bush (Lindera bensoin)

### **APPENDIX 3**

Items prohibited from collection. Note: this is not an exhaustive list. It is based on the most common plants that are traditionally collected by the Abenaki Nation.

### Wild items used and gathered

**Arrow Head Rattlebox** (Crotalaria sagittalis) – Collection prohibited. Very rare and legally protected as state threatened.

**Black Root** (Veronicastrum virginicum)– Erectile dysfunction - Collection prohibited. Very rare and legally protected as state endangered.

Common Milkweed (Asclepias syriaca) - *Azibiz*: There are several other rare and uncommon milkweeds. The common milkweed (Asclepias syriaca) found in many old fields is abundant and would be ok to collect. NO collection of butterfly milkweed (Asclepias tuberos). The raw root can be eaten to treat bronchial and pulmonary conditions. The dried root is also used as a remedy for pleurisy and rheumatism. It is also administered to women following childbirth. The flower buds can be cooked and eaten and taste similar to peas. In hot weather the flowers produce so much nectar that it crystallises out into small lumps which can be eaten and is very sweet.

**Butternut** (Juglans cinerea) – Bark collection prohibited. Collection of nuts is strongly discouraged because the species is uncommon and numbers are declining. If collected, do so sparingly.

Climbing American Bittersweet (Celastrus scandens) – Collection prohibited. Uncommon species that can easily be confused with non-native species (Celastrus orbicutaltus)

**Dogwood** (Cornus spp) – The inner bark was boiled and the tea drunk to reduce fevers and to restore a lost voice. Collection prohibited of flowering dogwood (Cornus florida). It is very rare and legally protected as state threatened.

**Frost Weed** (Helianthemum canadense) – Collection prohibited. Very rare and legally protected as state threatened.

**Ginseng** (Panax quinquefolius) – Collection prohibited. Very rare and legally protected by state and federal rules.

**Goldenseal** (Hydrastis canadensis) – Collection prohibited. Very rare and legally protected as state threatened.

**Ground Cherry** (Physalis longifolia) – Collection prohibited. Very rare and easily confused with other common species.

Horsemint (Monarda punctata) - Collection prohibited. Very rare and legally protected as state threatened.

May Apple (Podophyllum peltatum) – Collection prohibited. Very rare.

**Northern Sweet-coltsfoot** (Petasites frigidus) - Petasites frigidus, sometimes called "arctic sweet colt's foot" is rare and legally protected as state threatened. Collection prohibited of P. frigidus. Collection of common Colt's foot (Tussalago farfara) is allowed.

**Phragmite Reeds** (Phragmites australis) – Collection prohibited. Movement should be prohibited and regulated by noxious weeds quarantine.

Pin Oak (Quercus palustris) – Collection prohibited. Very rare and legally protected as state threatened.

Rattlesnake Fern (Botrychium virginianum) – *Masasizikwa Masozi*: Collection prohibited. Uncommon on public lands.

Sage Willow (Salix candida) - Collection prohibited. Uncommon species in VT.

Sassafras (Sassafras albidum) - Collection prohibited. Uncommon species in VT.

Shin Leaf (Pyrola elliptica) - Collection prohibited. Species too similar to other, rare species in VT.

**Snake Root** – (Sanicula spp) – Collection prohibited. Too many species are legally protected and can be confused with common species.

**St. John's Wort** (Hypericum perforatum) – Muscle relaxant Note: Collection prohibited of great St. John's-wort (Hypericum ascyron) as it is legally protected as an endangered species.

**Toothwort** (Dentaria diphylla) – Collection prohibited. Too many species are legally protected and can be confused with common species.

**Valerian** (Valeriana officinalis) – Collection prohibited. Valeriana officinalis is non-native and common, but closely resembles the native V. uliginosa which is very rare and legally protected as state-endangered.

Wild Indigo (Baptisia tinctoria) - Collection prohibited. Very rare in VT.

Wild Plum (Prunus Americana) – Collection prohibited. Very rare in VT and legally protected as state threatened.

Yellow Lady Slipper (Cypripedium parviflorum) - Collection prohibited. Uncommon or rare in VT.

Yellow Oak (Quercus muehlenbergii) - Collection prohibited. Uncommon in VT.

**NOTE:** - If there are additional species that the Licensee or its agents wish to collect, the Department shall review an amended list at the end of each calendar year.

# APPENDIX 4 Areas Prohibited from Collection: Vermont Natural Areas

The Department is allowed to designate Natural Areas by statue (10 V.S.A. §2607). The policy that describes how the FPR designates Natural Areas is set out in FPR Policy #7 which can be found on FPR's website.

Visit this website for an interactive map with more information about the location of public lands around the state. https://anr.vermont.gov/maps/nr-atlas

- 1. Amity Pond Natural Area. 182 acres, Town of Pomfret. This undeveloped area contains second growth forests and small ponds. Deed restrictions require the area be maintained for undeveloped, "primitive" types of outdoor recreation. The area has two rustic lean-to's for camping and trails for hiking and cross-country skiing.
- 2. Big Falls of the Missisquoi. 16 acres, Town of Troy. This site includes the largest undammed cascade and gorge remaining on a major Vermont river. The area includes big old hemlock and white pine trees. The plant life in this Natural Area is diverse and includes several uncommon species. The falls are a popular recreation attraction (swimming, fishing and viewing) as the site is readily accessible from Vermont Route 105.
- 3. Button Point Natural Area. 14 acres, Button Bay State Park, Town of Ferrisburg. Two-acre Button Island is a portion of an ancient (500 million years old) fossil coral reef. The eight-acre peninsula contains fossils, a mature forest stand (including oaks, hickories, pines, maples, and others), and several rare and endangered plant species. Although the Natural Area has been disturbed (house, trails, some vegetation management), it is significant botanically, ecologically, and geologically. The house serves as a nature center and as a residence for a park naturalist in the summer.
- 4. Cambridge Natural Area. 22 acres, Cambridge State Forest, Town of Cambridge. This is a stand of old white pine and hemlock on a steep, sandy hill. Individual trees are of large diameter and height. Access to this Natural Area is through the adjacent cemetery.
- 5. Camel's Hump Natural Area. 7,404 acres, Camel's Hump State Park, Towns of Bolton, Duxbury, Fayston and Huntington. This area includes 10 acres of alpine tundra, a rare community in Vermont, and an undisturbed subalpine boreal forest of balsam fir, red spruce, and heart-leaved paper birch. Some of Vermont's best-known hiking trails traverse the area. It was designated a National Natural Landmark in 1968.
- 6. Campmeeting Point Natural Area. 3 acres (2,200 feet of Lake Champlain shoreline), Knight Point State Park, Town of North Hero. This is the most extensive and least disturbed lakeside cobble beach in Vermont and supports rare plant species. The adjacent woodland is a scenic grove of large oaks and hickories.
- 7. Charles E. Smith Natural Area. (designation pending), Alburg Dunes State Park, Town of Alburg. One of the few examples of a sand dune community in Vermont, this Natural Area is being managed to protect and restore the rare plants that grow here. In addition to the dunes, the State Park includes a large forested wetland complex with the largest black spruce swamp in Grand Isle County.
- 8. Daniel's Notch Natural Area. 100 acres, Mount Mansfield State Forest, Town of Cambridge. One of Vermont's largest old-growth forest stands, ages of the trees here range from 90 years to over 200 years. Large specimens of yellow birch and sugar maple are found here.

- 9. Emerald Lake Natural Area. 4 acres, Emerald Lake State Park, Town of Dorset. This small Natural Area is on a steep bank at the south end of the State Park. It is an example of an old-growth forest in Vermont. Hemlock, sugar maples, and other hardwood species grow here, with several trees of noteworthy age and size.
- 10. Fisher-Scott Memorial Pines. 22 acres, Town of Arlington. This site is considered one of the finest large-diameter white pine stands in Vermont. The stand has historical as well as ecological significance, as it was the writing retreat of well-known Vermont author Dorothy Canfield Fisher. Pines in this area are among the biggest and tallest in the state, and sizable hemlocks grow on the slopes along Mill Brook. This site is also a National Natural Landmark (1976).
- 11. Gifford Woods Natural Area. 7 acres, Gifford Woods State Park, Town of Sherburne. This is perhaps Vermont's best known old-growth northern hardwood stand, with many grand-sized individual trees of sugar maple, beech, yellow birch, basswood, white ash, and hemlock. The understory is rich with native wildflowers. Though small, it has been much visited and researched. It was designated a National Natural Landmark in 1980.
- 12. Granville Gulf Spruce-Hemlock Stand. 20 acres, Granville Gulf Reservation, Town of Granville. An old-growth stand of red spruce and hemlock grows on the steep rocky slopes at the north end of Granville Gulf. This site contains many old trees, but because of the ledges and thin soils, these trees are relatively small.
- 13. Hamilton Falls Natural Area. 211 acres (includes falls and a forest buffer), Jamaica State Park, Town of Jamaica. Cobb Brook cascades 125 feet down a mountain slope, through a pine-hemlock woodland and into a series of large potholes. There are several falls, the most spectacular of which drops 40 to 50 feet into a large pool. Hamilton Falls is unique, dramatic, and dangerous. Do not take chances on the steep and slippery rocks.
- 14. Hazen's Notch Natural Area. 273 acres, Hazen's Notch State Park, Town of Westfield. Hazen's Notch is a steep-walled gap between Sugarloaf and Haystack Mountains, with impressive southfacing cliffs. The cliffs are of serpentine rock and support rare alpine and serpentine-adapted plant species. Peregrine falcons nested here historically. The Long Trail passes through the Natural Area.
- 15. Highgate Cliffs Natural Area. 37 acres, Highgate State Park, Town of Highgate. This small headland above Missisquoi Bay on Lake Champlain encompasses three significant natural communities with several uncommon and rare plant species. A hiking trail follows the crest of the bluff. The first turkey vultures nesting in Vermont were found here in 1975, and the birds have continuously nested here since. Peregrine falcons also nested here historically. Along the lake is a fine undisturbed lakeshore cobble community.
- 16. Kingsland Bay Natural Area. 50 acres, Kingsland Bay State Park, Town of Ferrisburgh. This Natural Area includes two peninsulas on Lake Champlain separated by scenic Kingsland Bay. Both support unspoiled natural plant communities, on the shoreline as well as on and behind their bluffs. Several rare plants grow here. On McDonough Point, a hiking trail goes along the perimeter through a mature forest of sugar maples, hickories, oaks, and other hardwood species. It offers several fine overlooks of the lake. There is no formal trail on the Hulburt (western) portion of the Natural Area, which contains one of Vermont's best examples of a lake bluff cedar-pine forest.
- 17. Lake Carmi Bog Natural Area. 140 acres, Lake Carmi State Park, Town of Franklin. The bog is at the south end of the park and is almost entirely dominated by black spruce and tamarack,

with an understory of mountain holly, other shrubs, sedges, sphagnum mosses, and other typical bog plants. The black spruce bog is largely undisturbed and is unusual in Vermont for its size.

- 18. Lords Hill Natural Area. 25 acres, Groton State Forest, Town of Marshfield. This is a fine old-growth stand of hemlock-northern hardwoods on the slopes of Lords Hill. The site contains many large specimens of white ash, sugar maple, red maple, basswood, yellow birch, beech, red spruce, balsam fir, and hophornbeam. It is surrounded by privately-owned property and permission to cross is needed to gain access to this Natural Area.
- 19. Lucy Mallary Bugbee Natural Area. 12 acres, Towns of Peacham and Danville. This Natural Area includes Stoddard Swamp, a northern white cedar swamp, and a fen (type of peatland) rich with a variety of wildflowers, some of which are listed as threatened and endangered. The Natural Area was named after a pioneer in the protection of Vermont's wildflowers and given to the State from the New England Wildflower Society.
- 20. Marl Pond and Swamp Natural Area. 30 acres, Willoughby State Forest, Town of Sutton. A small, scenic, calcium-rich pond is bordered by a mature northern white cedar swamp with several rare plants. The pond bottom was mined historically for its marl (calcium and magnesium carbonate deposits), which was used locally as a fertilizer.
- 21. Mendon Peak Natural Area. 90 acres (state-owned portion above 3200 feet), Coolidge State Forest, Town of Mendon. This is a remote high-elevation forest of red spruce, balsam fir, white and yellow birch, and mountain ash. Mendon Peak has a small area of dwarfed shrubs and alpine plants and supports a diversity of woodland bird species. There is no trail access.
- 22. Morristown Bog Natural Area. 30 acres, Town of Morrisville. East of Route 100 is a large undisturbed black spruce-tamarack bog with several rare plant species. Originally acquired as a source of peat for the state tree nursery (but never mined), it was later designated a Natural Area for its characteristics as an outstanding peatland.
- 23. Moss Glen Falls Natural Area (Granville). 5 acres (includes the falls and a buffer zone), Granville Gulf Reservation, Town of Granville. This is one of the most visited falls in the state, immediately adjacent to Route 100 in Granville Gulf. Deer Hollow Brook cascades over 30 feet into a large pool. The falls are best viewed from the bottom. Do not climb the steep, slippery rocks here. They are very dangerous.
- 24. Moss Glen Falls Natural Area (Stowe). 80 acres (includes the falls and a buffer zone), C.C. Putnam State Forest, Town of Stowe. This is one of the highest waterfalls in the state, with a total drop of over 100 feet. It is also one of the most beautiful, as the water courses through a gorge, into pools, and over sloping vertical walls in a deep forest dominated by hemlock. The steep slippery rocks here are hazardous. Do not climb them.
- 25. Mt. Mansfield Natural Area. 3,850 acres, Mt. Mansfield State Forest, Towns of Bolton, Cambridge, Stowe, Underhill, and Waterbury. This area encompasses the largest alpine tundra in Vermont (200 acres, owned by the University of Vermont), an extensive and unbroken subalpine heath krummholz community (stunted forest near timberline) and subalpine spruce-fir forest, and Smugglers Notch, a spectacular site significant for its cold calcareous cliff plants, nesting peregrine falcons, and geologic formations. It is a National Natural Landmark (1980). There are hiking trails here, including the Long Trail.
- 26. Peacham Bog Natural Area. 748 acres, Groton State Forest, Town of Peacham. This is the second largest peatland in Vermont, one of the two documented "raised" (slightly domed due to peat build-up at the center) bogs in the state. The Natural Area includes the bog of 125 acres and

an extensive buffer of a variety of wetlands and upland softwoods. Many wildlife species, including moose, bobcat, and fisher, use the area.

- 27. Shrewsbury Peak Natural Area. 100 acres, Coolidge State Forest, Town of Shrewsbury. The State-owned portion of the peak is a popular hiking destination and is surrounded by an extensive, undisturbed high-elevation forest that is habitat for a variety of forest birds. A hiking trail to the summit provides opportunities for spectacular views.
- 28. Spectacle Pond Natural Area. 15 acres, Brighton State Park, Town of Brighton. This site contains a fine natural stand of mature red pines, with an understory of boreal plant species such as sheep laurel, pipsissewa, blueberries, and wintergreen. Natural red pine forests, especially of large individual trees, are uncommon in Vermont, particularly in the Northeast Kingdom. Ravens have nested here.
- 29. Tabletop Mountain Natural Area. 129 acres, Groton State Forest, Town of Groton. Located on the State-owned portion of Tabletop Mountain, this area is not "old-growth" in the strict sense, but has been set aside to allow it to become a representative mature hardwood forest (beech, yellow birch, sugar maple, and hemlock). It contains occasional, scattered trees of large size and old age.
- 30. Terrible Mountain Natural Area. 798 acres, Okemo State Forest, Towns of Weston & Andover. The area includes the summit of undeveloped Terrible Mountain and two smaller remote peaks featuring subalpine forest of red spruce and balsam fir and higher elevation stands of beech, birch and maple trees. There is no trail access into the area.
- 31. Tinker Brook Natural Area. 106 acres, Coolidge State Forest, Town of Plymouth. This relatively undisturbed red spruce-hemlock stand is on the steep, rocky slopes of Tinker Brook. Trees found here include scattered large red spruce, yellow birch, hemlock, white ash, and sugar maple. The brook itself is a beautiful woodland waterway with small waterfalls and cascades.
- 32. Weybridge Cave Natural Area. Above-ground land area is one acre; the subterranean acreage is unmeasured. Weybridge Cave State Park, Town of Weybridge. This is thought to be the largest cave in Vermont and the second largest in New England. According to spelunkers, it is an excellent cave to explore for its geologic features and passageways. Only expert cavers should attempt exploration, as both the descent and passageways are very difficult and require special equipment.
- 33. Willoughby Cliffs Natural Area. 950 acres (includes cliffs and forested buffer zone), Willoughby State Forest, town of Westmore. The spectacular cliffs of Mt. Pisgah and Mt. Hor rise vertically from Lake Willoughby, and these boreal calcareous cliffs harbor a diversity of rare and endangered plant species. Peregrine falcons also nest on the cliffs. There are excellent hiking trails here, offering fine views of the entire region. A National Natural Landmark (1967).
- 34. Worcester Range Natural Area. 4,032 acres, C.C. Putnam State Forest, towns of Middlesex, Waterbury, and Worcester. All the land above 2,500 feet elevation in this state forest is designated Natural Area. It includes the summits of Hunger Mountain, White Rocks, Worcester Mountain, and other peaks, and embraces a large, unbroken subalpine forest of red spruce and balsam fir. Several hiking trails run though this area