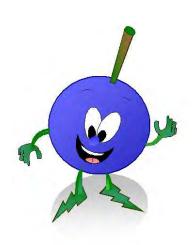
# The Essential Guide For Successful Wild Berry Farms In Southeast Alaska



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# **NOTES**

#### I. INTRODUCTION

Wild berry farming for profit? You've got it! Growing in many backyards, particularly in rural areas of southeast Alaska, is a prized specialty crop, one that is in great demand with a wide variety of markets. This is a crop for



The product of a couple of hours of easy picking on a farm in southeast Alaska using a berry rake.

which many are willing to pay a lot of money. Consider it "blue gold," if you will, as the demand for Alaska's wild blueberries and wild black huckleberries is of widespread proportions. Alaska's wild berries are sought after from New Zealand to Japan to England to name just a few and all the while Alaska, rich in potential, has been totally missing out on the opportunity to produce berries as a commercial crop. Southeast Alaska offers the perfect environment where these

berries <u>FLOURISH</u>! We don't have to try to make them grow, they just do! How do we capitalize on these berries? July through September we should be harvesting bumper crops of berries. October through June we should be doing everything we can to encourage those bumper crops of berries.

In southeast Alaska it's not difficult to make an actual farm in our backyards no matter where you are. It can be a hobby or a business. A farm can supply your own spin off business, making wine or confections or jellies and syrups or if your location is right you can simply provide fresh and frozen berries! Mature wild black huckleberry and blueberry bushes in southeast Alaska can produce over a gallon of berries per plant and even the small plants often bear large and abundant fruit.

The purpose of this booklet is to guide you through the process of starting a wild berry farm in southeast Alaska in a step-by-step manner with easy to find references including mailing addresses, phone and fax numbers and links to web sites and publications. These are exactly the same steps we had to take,

but it took us hours and hours of internet research, many, many telephone calls, wrong numbers and wrong agencies, and the absolute kindness and patience of people in all of the organizations listed below.

Agriculture may be new to southeast Alaska, but our moderate coastal climate is now encouraging many people to look toward farming and spin-off products as a worthwhile means to supplement their income or transition to depending on their entire income from this product. We believe this can be done and that there is room for many small and large farms. Agriculture is a viable and profitable industry in other parts of the state and one that can be initiated in southeast Alaska by farming wild berries.

Officially starting a farm is no more difficult than opening any other kind of business. There is a lot of information out there, particularly on the Internet, but it's not all in one spot. It can get pretty confusing just learning about berries, not to mention business set-up in general. This Guide is intended to provide, grouped in a single publication, links to information on wild berry cultivation and commercialization, how to get started, how to become established as a producing farm, and where and how to obtain help with things such as funding and financing.

Farming these wild berries in particular is an excellent place to begin introducing agriculture to southeast Alaska; the berries already grow here, the climate and the soils are amenable to row planting and wild stand augmentation, and we have berries that thrive like no other place in the state. Potentially, Alaskan wild blueberry and black huckleberry farm produce could challenge commercial domestic



This particular oval-leafed blueberry is one from a young, well-producing cultivar.

blueberry farms in Canada, Washington, Oregon, and Idaho. Alaskan berries still have the advantage of being much higher in nutritive values than any domestic blueberries. There are no domestic black huckleberry farms that we are aware of at this time.

Eventually, we must also look farther than individual farms to produce all the wild berries needed to meet this huge demand. Formation of co-ops could be very beneficial to individual farmers and increase our ability to provide berries in larger quantities. Communities and villages could capitalize on farms, which, in turn, would provide many jobs as well as a new resource to their economic base. Don't forget, it's not just the whole or frozen berries either. Spin off businesses creating value-added products could open and prosper. One of the obstacles to berry farming in rural areas is the dependence on weather for shipping, not to mention the cost of overnight deliveries of berries, fresh or frozen. With the strength of a nonprofit co-op, equipment could be purchased to manufacture dried berries and berry powder.

Successfully farming wild berries is an undertaking that will have a major impact on the economics of rural southeast Alaska.



Port Protection, a wild berry farm location in rural southeast Alaska (no road access).

# 1. SOUTHEAST ALASKA'S WILD BERRIES

When we first considered commercially producing blueberries, we had recently moved from, initially, the Matanuska-Susitna Valley in south-central Alaska to western Washington and finally to the temperate coastal climate of southeast Alaska. Long years in interior Alaska definitely

demonstrated that really good wild blueberry patches were difficult to find and you often had to compete with bears and people to harvest a few cups of berries on a good day. In the relatively mild and optimum berry-growing environment of southeast Alaska, we thought it might be a good idea to start a blueberry farm considering the climate and especially the rich, organic, and very acidic soil. We contacted Dr. Pat Holloway of the University of Fairbanks and approached her with the idea of cultivating domestic blueberries, desiring information on the optimum domesticated species for this area. Her response was surprising to us; she said why not just find a place where the berries grow naturally? What we were not aware of, but she was, is that the berries with the highest demand, the wild blueberries and black huckleberries, grow abundantly in southeast Alaska.



Black huckleberry abundant with berries hidden beneath the leaves.

There are three types of wild dark berries native to southeast Alaska:

• Black huckleberry, (Vaccinium membranaceum). This is a shrubby plant that may exceed 6 feet in height. The large, shiny, dark purple berries are tart, but taste very good. Even though they appear quite shiny, their exterior is not waxy or thick. They are often found in the mountains, in clearcut areas, and

growing in coniferous woods. They are frequently found where you find blueberries, often intertwined. These berries are ready for harvest in late July and harvests can continue through September. This is a very interesting site with a lot of scientific and geographical information available: <a href="http://www.fs.fed.us/database/feis/plants/shrub/vacmem/introductory.htm">http://www.fs.fed.us/database/feis/plants/shrub/vacmem/introductory.htm</a> <a href="http://www.fs.fed.us/database/feis/plants/shrub/vacmem/introductory.htm">http://www.fs.fed.us/database/feis/plants/shrub/vacmem/introductory.htm</a>

• Oval-leafed blueberry, (v. Ovalifolium) is a tall shrub whose leaves are oval in shape rather than egg-shaped. They grow in coniferous forests, along streams banks, and in dry, open areas. Very sweet and tasty berries. These

are the earliest blooming berries with harvests beginning as early as late June to mid-July and continuing through September. This is the same interesting site as above with detailed information on the *v. Ovalifolium*: <a href="http://www.fs.fed.us/database/feis/plants/shrub/vacovl/introductory.html">http://www.fs.fed.us/database/feis/plants/shrub/vacovl/introductory.html</a>.

• Alaskan blueberry (v. Alaskensis Howell) is a late blooming blueberry plant. It is a smaller plant and it is the result of a natural cross between the ovalleafed blueberry and the red huckleberry that also grows in this area. These offer harvests that typically begin in mid- to late July and continue through September. Again, the same interesting publication focused on the Alaskan blueberry this time:

http://www.fs.fed.us/database/feis/plants/shrub/vacala/all.html. These particular plants also grow as far north as Seldovia and on the Aleutian Chain.

### 2. ALASKA'S WILD BERRIES VERSUS DOMESTIC BERRIES

Practically everyone has heard of the incredible health benefits of Alaska's prized wild blueberries and black huckleberries: The darker the berry, the more potent its oxygen radical capacity (ORAC) value.

The University of Alaska Fairbanks offers an excellent online publication describing specific ORAC values. Alaska Blueberries, by Julie Cascio, Extension Faculty, Health, Home and Family Development: <a href="http://www.uaf.edu/files/ces/publications-db/catalog/hec/FNH-00111.pdf">http://www.uaf.edu/files/ces/publications-db/catalog/hec/FNH-00111.pdf</a>

Compared to domestic blueberries, Alaska's wild berries contain a much higher ORAC value and they are considered a "super food" because of their reported impressive effects on many health issues including aging and types of neurodegenerative disorders. These effects also include stroke protection, cancer prevention, cell rejuvenation, preservation of brain function, cognition improvement, and may even be used to treat brain disorders. These are some things that have created a demand that Alaska cannot fill without establishing wild berry farms. A recent nutritional study by Dr. James Joseph at Tufts

University concluded "...blueberries also cause 30 percent neurogenesis (new brain cells) at any age and may help in reversing aging." This is an excellent article on health effects of wild blueberries:

http://www.wildblueberries.com/health\_benefits/research.php.

Many potential farms with old growth and abundant berry bushes are located in pristine wilderness areas that only need good stewardship, not extensive soil remediation or reclamation. Our experiences have demonstrated there is no need for chemicals in terms of pest control or growth. With the big push towards healthy foods, more and more consumers are turning to organic products and are willing to pay the additional price for this "naturally organic" crop.

The Alaska Plant Materials Center has very helpful publications at this site, <a href="http://plants.alaska.gov/index.php">http://plants.alaska.gov/index.php</a>. Their phone number is (907) 745-4469.

II. STARTUP

1. ADMINISTRATION



If you are setting up a farm for commercial purposes, it is a necessary evil to also approach it as a business, and that means there is a paperwork side to the farm. There are many resources available, most times for free, to assist you with your business development, from type of company legal structure to marketing assistance. The following information provides a listing of agencies that will assist you in building a business plan, business start-up information, funding, etc. They can help you determine your best business entity, individual, partnership, corporation or LLC.

As you get started, make sure you complete the following steps. This is about setting up your "notebook," which will be one of your most valuable tools. It is also about filing, another seemingly minor, but actually extremely important detail of any business.

If you are the type to scribble notes, make a box and toss everything in there, periodically go through and transfer everything to the correct form or section or file. Keep notes...notes about conversations, notes about interesting articles, notes about good ideas, notes about cool things to make or investigate. There will be lots of things you will wish you had "made a note of."

STEP 1: Here is your very first step: Obtain a 3-ring notebook and 3-hole paper punch. Keep track of the people you talk to and when. Add a section for names, addresses, telephone numbers and e-mail in your notebook and keep track of them, for example:

Date	Name	Telephone E-	mail	Notes	
6/11/1	I DNR/Jane Doe	555-1212	JD@DNR.ak.gov	Grants	
6/15/1	DNR/John Nun	333-1212	JN@DNR.ak.gov	Land Use	

Leave blank lines and plenty of space to write notes and comments. These will be very important for later references.

## Start another section for user names and passwords:

Agency	User Name	Password	Web Site	Notes	
CCR	Jhelper24	myBlueHeaven\$73	grants.gov	Complete by 1/1/12	

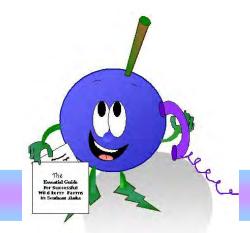
These user names and passwords should be kept secure, but not so secure you can't access all the information easily. You will find that each agency requires a different type and length of password, some must contain letters and numbers and some want upper and lower case letters, numbers, and symbols and must be at least 13 but no greater than 15, etc. You have to record these numbers in some manner because you will never remember them all. Having them all in one place will save a great deal of time and effort in the future.

Once you are actively working with one or more agencies, start keeping a business diary with notes of phone call dates and subject, commitments, follow up items, etc.

Finally, if you have access to a spreadsheet program, compile your handwritten information onto spreadsheets, print, punch and place in notebook. Again, make sure you leave plenty of blank lines, as this will be continually updated.

Make sections for each grant or program you apply for and sections for business information such as copies of your business license, EIN form, etc., which you will frequently reference as well.

A filing system is essential, even a very basic one. Keep your files updated, you will use them frequently!



The State of Alaska has excellent programs and resources for small business startup and development of your farm, including funding, operating and marketing information. The

following organizations are the best initial contacts to make and develop as your farm and business development continues:

<u>Alaska Small Business Development Center (University of Alaska)</u>: This is an awesome place to receive detailed information and assistance on co-op formation as well!

Web: http://aksbdc.org/

Anchorage:

430 W. 7th Avenue, Suite 110, Anchorage, AK 99501-3550

Phone: (907) 274-7232 Fax (907) 274-9524

Toll-free (800) 478-7232

Juneau:

3100 Channel Dr., Suite 306, Juneau, AK 99801-7814

Phone: (907) 463-3789 Fax (907) 463-3430

Ketchikan:

111 Stedman Street, Suite 201, Ketchikan, AK 99901-6549

Telephone: (907) 225-1388

Fax (907) 225-1386

### U.S. Small Business Administration:

Web: <a href="http://www.sba.gov/about-offices-content/2/2821">http://www.sba.gov/about-offices-content/2/2821</a>

Anchorage:

510 L Street Suite 310, Anchorage, AK 99501

Telephone: 907-271-4022

Washington DC:

409 3rd St, SW, Washington DC 20416

Answer Desk Telephone: 800-827-5722 Answer Desk Email: <u>answerdesk@sba.gov</u>

### Small Business Assistance Center:

Web: <a href="http://www.commerce.state.ak.us/ded/dev/smallbus/home.cfm">http://www.commerce.state.ak.us/ded/dev/smallbus/home.cfm</a>

### Anchorage:

Division of Economic Development Department of Commerce, Community, & Economic Development 550 West 7th Ave., Suite 1770, Anchorage, AK 99501

Telephone: 907-269-8104

Fax: (907) 269-5666

These are some of the very best agencies we have found for assistance in business start-ups. They offer so much information and help it is almost mind-boggling. The SBDC and SBA also offer mentoring and counseling programs which pair you up with experienced business people who are willing and extremely able to help with your business. We highly recommend visiting their web sites if you have the Internet; if not, give them a call. These agencies are invaluable with all they have to offer…even help with grants and loan programs.

## A. Obtaining An Employer Identification Number (EIN):

If you are unsure of whether or not you need an EIN check out this form at <a href="http://www.irs.gov/businesses/small/article/0">http://www.irs.gov/businesses/small/article/0</a>, id=97872,00.html; it will help you to make your determination.

If you decide that you need to apply for an EIN go to <a href="http://www.irs.gov/businesses/small/article/0,id=97860,00.html">http://www.irs.gov/businesses/small/article/0,id=97860,00.html</a>. This page will walk you through the entire process and you will often receive the number at the end of the session.

If you do not have internet access you can obtain an EIN immediately by calling the Business & Specialty Tax Line at (800) 829-4933. An assistor takes the information, assigns the EIN, and provides the number over the telephone.

### B. Business Licensing for Alaska

In most cases it is required for you to have a business license, but the process is relatively easy. Fees and followup vary depending on type of business entity selected. Business entities can be set up online, necessary forms filed, fees paid, annual reports filed, and a business license available for print at completion, along with any other paperwork you may have filed. Very easy to use site with great instructions for each form as well.

## Department of Commerce, Community and Economic Development; Corporations, Business & Professional Licensing

General Information: <a href="http://www.commerce.state.ak.us/CBP/Main">http://www.commerce.state.ak.us/CBP/Main</a>

Forms & Fees: <a href="http://www.commerce.state.ak.us/CBP/Main/FormsFees.aspx">http://www.commerce.state.ak.us/CBP/Main/FormsFees.aspx</a>

### Anchorage:

550 West Seventh Avenue, Suite 1500, Anchorage, AK 99501-3567

Telephone: (907) 269-8160

Fax: (907) 269-8156

### Juneau:

P.O. Box 110806, Juneau, AK 99811-0806

Telephone: (907) 465-2550

Fax: (907) 465-2974

This is the only site to formally license your business in Alaska. Many of the forms can be filled out online and you can immediately print out your business license. If you choose to incorporate, either as a corporation or an LLC, it is a simple and very easy process to do online. If you do not have internet access

you can contact them by telephone and they will send the necessary publications and forms directly to you.

### C. Alaska Employer Identification Number

If you have employees and need to obtain an Alaska Employer Identification number, this web site will take you through the all the steps; <a href="http://labor.alaska.gov/estax/forms/toc\_forms.htm">http://labor.alaska.gov/estax/forms/toc\_forms.htm</a>

Here is their main site, it contains some relevant and helpful material: <a href="http://labor.alaska.gov/estax/home.htm">http://labor.alaska.gov/estax/home.htm</a>

#### Juneau:

Alaska Department of Labor and Workforce Development Employment Security Tax PO Box 115509, Juneau, AK 99811-5509

Telephone: (907) 465-2757

Toll Free: (888) 448-3527 or (888) 448-2937

### D. Other Business Registrations

## Dun & Bradstreet Registration Number (DUNS)

In some cases you will be required to have a DUNS number for credit reporting. This, again, is a simple registration and can be done easily online. Start on the following web page and just follow the links.

Web Site registration: <a href="https://iupdate.dnb.com/iUpdate/companylookup.htm">https://iupdate.dnb.com/iUpdate/companylookup.htm</a>
Telephone registration: 1-888-814-1435

<u>Central Contractor's Registration (CCR)</u>: You have to complete this registration to bid on federal government grants. It can take a while to process everything so you should plan on a couple of months to finish if you are planning on applying for any federal government grants. You can browse

the grants.gov grants list and then apply if you find something you want to try to win.

### Register Online:

http://portal.hud.gov/hudportal/HUD?src=/program\_offices/cpo/ccr

### Tip Sheets:

http://www.epa.gov/ogd/forms/Central\_Contractor\_Registration\_Tip\_Sheet.pdf

Whew!

Help Line: 1-888-227-2423

CCR registration can be a rather time-consuming undertaking, but the site essentially walks you through each step. Take your time and

remember to write down all your passwords and ID numbers as you receive them and there will be several. Always keep these passwords and ID numbers handy. The above tip sheet is a great resource for CCR registration and both provide an outline of the steps you will have to complete. If you should still encounter problems, the help line personnel are awesome and knowledgeable.

## 1) Farm Registration

For many licensing and funding programs you will be required to obtain a farm number. This is easily accomplished by registering your farm with the Farm Service Administration. Even if you don't need a number for funding, it is still good advice to have a farm number whenever possible; it also means your farm counts!

# Farm Service Administration (FSA):

General information:

http://www.fsa.usda.gov/FSA/stateoffapp?mystate=ak&area=home&subject=landing&topic=landing

Palmer:

Alaska State Farm Service Agency 800 West Evergreen Ave., Suite 216, Palmer, AK 99645

Telephone: (907) 761-7738

Fax: (907) 761-7795

Sitka:

201 Katlian Street, Suite 109, Sitka, AK 99835-7511

Telephone: (907) 747-3506

Fax: (907) 747-3597

Southern County FSA Service Center (SE): 800 West Evergreen Ave., Suite 216, Palmer, AK 99645

Telephone: (907) 761-7754

Fax: (907) 761-7788

Toll-free: 1-866-872-3320

Rural Advancement Foundation International. The site,

http://www.rafiusa.org/blog/?p=346/, also known as RAFI-USA, has some great information about farm registration benefits, but unfortunately the only way to contact them is via the internet.

# 2. FINANCIAL RESOURCES A. Grants

Believe it or not, even though most grant funding opportunities do not include for-profit businesses, having a farm can be a benefit in this category, particularly since almost all of southeast Alaska is considered rural. This provides other opportunities including economic development funding for workforce development in small, rural communities.

**grants.gov**: This is a federal listing of all federal grants available. Web: <a href="www.grants.gov">www.grants.gov</a> and then choose Find Grant Opportunities: <a href="http://www.grants.gov/applicants/find\_grant\_opportunities.jsp">http://www.grants.gov/applicants/find\_grant\_opportunities.jsp</a>.

Tip Sheet: http://www.neh.gov/grants/grantsgov/grantsgovchecklist.html

Telephone: 1-800-518-4726

This site provides an overview of all grants available and it takes a bit of time to get familiar with the program. To apply for federal grants, you must, in most cases, register with the Central Contractor's Registration (see "CCR" above).

**NOTE:** One very important and pertinent example of federal funding available to farms is the SBIR/STTR grant program, especially since farming Alaska's wild berries commercially is a new process with much to still be learned. This grant can apply to the farms themselves or value-added products. The SBIR is an amazing grant for which private businesses can apply. It is a very interesting program and should be seriously reviewed and considered. As there are very specific guidelines for SBIR grants, not every farm will qualify, however, if you have a new idea that will increase crop harvests, shorten growing seasons, new methods of cultivation, etc., if you have an innovative match with your objectives and their goals you may well qualify for this grant The SBIR/STTR program is supported by an organization known as TREND (see listing below). The folks at TREND will walk you through the program and determine if your project suits their criteria for SBIR candidates. This is a highly sought after grant award and requires a lot of work and support from experts, but has been won by small farms (not in Alaska) in the past. The sister program to the SBIR is the STTR; the STTR can only be applied for if you have a "partnership" working relationship with a nonprofit organization such as a university, hospital, community organization, etc. If you should decide to pursue an SBIR, here is the TREND information; they are certainly the place to start:

### TREND Small Business Economic Development

This agency primarily assists with preparation of SBIR/STTR phase 0, 1 and 2 grants, but they also provide tremendous help with mentoring and marketing. The people are amazing and their resources are extensive.

Web: <a href="http://www.commerce.state.ak.us/investments/sbed.cfm/">http://www.commerce.state.ak.us/investments/sbed.cfm/</a>

Juneau:

3032 Vintage Blvd. Suite 100 PO Box 34159, Juneau, AK 99803-4159 Telephone: (907)465-2510 Fax (907)465-2103 Toll-Free 1-800-478-5626 within Alaska

Anchorage:

550 W. 7th Ave. Suite 1930. Anchorage, AK 99501-3570

Telephone: (907)269-8150

Fax (907)269-8147

### B. State Funding Opportunities, Grants And/Or Loans

The following agencies are very helpful and also have a variety of loan and grant programs available.

### Alaska Economic Development

Web: http://www.commerce.state.ak.us/ded/home.htm

### Juneau:

### <u>Development</u>:

State Office Building, 9<sup>th</sup> floor 333 Willoughby Avenue, Juneau, AK 99811-0800

Telephone: 907-465-2500

Fax: 907-465-2103

### Funding:

3032 Vintage Park Blvd, Suite 100, Juneau, AK 99801

Telephone: 907-465-2510

Fax: 907-465-2103

## Juneau Economic Development Council

This agency works specifically with southeast Alaska.

Web: <a href="http://jedc.org">http://jedc.org</a>

### Juneau:

612 W. Willoughby Ave., Suite A, Juneau, AK 99801

Telephone: (907) 523-2300

Fax: (907) 463-3929

### Alaska Department of Natural Resources, Division of Agriculture

This agency also offers the Alaska Grown emblem application forms.

Web: http://dnr.alaska.gov/ag/

Palmer:

1800 Glenn Highway, Suite 12, Palmer, AK 99645

Telephone: 907-745-7200

Fax: 907-745-7242

Check out DNR's Division of Agriculture Revolving Loan Fund at <a href="http://dnr.alaska.gov/ag/ag\_arlf.htm">http://dnr.alaska.gov/ag/ag\_arlf.htm</a>.

Some of the grants available include:

- Farm To School (FTS) Grant
- Cooperative Marketing Program (CMP) Grant
- Innovation Grant
- Specialty Crop Competitive Grant
- Teachers' Scholarship Program
- Youth Agriculture Education

### National Resources Conservation Service

National: http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/home

Alaska: <a href="http://www.ak.nrcs.usda.gov/">http://www.ak.nrcs.usda.gov/</a>

State Office:

800 W. Evergreen Avenue, Suite 100, Palmer, AK 99645

Telephone: (907) 761-7760

Fax: (907) 761-7790

Juneau Field Office:

175 South Franklin Street, Suite 424, Juneau, AK 99801-1304

Telephone: (907) 586-7220

Fax: (907) 586-7383

### Farm Service Administration (FSA)

Alaska Web Site:

http://www.fsa.usda.gov/FSA/stateoffapp?mystate=ak&area=home&subject=landing&topic=landing

State Office:

800 West Evergreen Ave., Suite 216, Palmer, AK 99645

Telephone: (907) 761-7738

### Southeast Conference

Web: <a href="http://www.seconference.org/grantsRegionalInformation">http://www.seconference.org/grantsRegionalInformation</a>

Juneau:

P.O. Box 21989, Juneau, Alaska 99802-1989

Telephone: (907) 523-4350

# III. FARM DEVELOPMENT AND MANAGEMENT 1. The Root of the Matter

Those of us in southeast Alaska know that there is very little real dirt here, referring to normal mineral soil. What we have is primarily rock with layers of years' of composted trees and leaves and other organic material from an old-growth coniferous forest creating a rich black soil. This material can be anywhere from inches thick to feet thick and is quite possibly the key to the successful growth of these plants. This soil material is essential for successful rhizome (wild berry root) formation and is unique to our southeast rain forested area. This is a short but interesting and informative article about southeast Alaska's soils and agricultural conditions <a href="http://www.uaf.edu/files/ces/publications-db/catalog/anr/HGA-00237.pdf">http://www.uaf.edu/files/ces/publications-db/catalog/anr/HGA-00237.pdf</a>.

Alaska's wild blueberries and huckleberries sustain themselves through a vast underground network of tiny roots called rhizome. Shoots (also known as canes) push up through the soil in widely spaced areas and yet may still be part of a single "colony" which is the main root and plant system that may be

centered several yards away. This explains why these wild berry plants, huckleberries in particular, are difficult to impossible to dig up and transplant from a forest area, an activity that often kills the entire plant, as those tiny roots are very fragile and easily destroyed. It may take up to 2 years for it to be obvious that the berry plant is dead. Of special note, wild berry colonies may actually be centuries old, especially here in the rain forests of southeast Alaska.

Wild berry cultivation is a rather novel concept, in the past known to be notoriously difficult to propagate, but as more and more interest has been focused on these berries, small farms are being encouraged to start up and expand. It is now possible to cultivate berries using your own seeds or seeds you have purchased, or to purchase seedlings to get started. Berry plants have been successfully grown using:

Air layering is girdling an existing berry plant, wrapping the above noted soil around the girdled area, and creating a new root ball with a cloned plant. This is highly labor intensive, but creates a plant that is identical to the mother plant. This is a wonderful method to use when you want to start new colonies quickly or if you have a wonderful fruit producer or one that is exceptionally hardy and you want to encourage those particular plant cultivars.



Air-layered wild berry plant.



Wild berry seeds...by the foot!

- Seeds: Seed propagation and most recently mass production of seedlings using a controlled growing environment, has been highly successful.
- UAF in Sitka conducted an experiment on the cultivation of wild blueberries, please check out this article:

http://www.uaf.edu/files/ces/publications-db/catalog/anr/HGA-00232D.pdf.

• There are some experiments now being conducted on the potential of tissue cultivation as a successful and worthwhile means of berry propagation.

This is an interesting article, although it is based in Oregon, but does give a great deal of information that would also be pertinent to our berries: <a href="http://www.homeorchardsociety.org/article/40/">http://www.homeorchardsociety.org/article/40/</a>.

### 2. Row Cultivation Versus Wild Stand Management

There are essentially two ways to go about farm production either management of an existing wild stand or starting anew with row cultivation. Row cultivation, in particular, has exciting potential to provide for massive harvests of wild berries. Seedlings can be planted in rows and can potentially be harvested mechanically if crop production should warrant. This is an excellent publication, a bit out-dated, but still full of good information: <a href="http://www.wildblueberries.net/prod.html">http://www.wildblueberries.net/prod.html</a>.



Established farm using wild stand management with old growth colonies.

Farms that are established using existing old growth colonies are primarily managed to produce maximum growth. Management includes removing competing vegetation, exposure to sunlight and manual watering during drought spells. Removing brush and small trees to allow full sunlight to the plants have resulted in greater yields over the course of approximately 2 years,

particularly if the area was previously well shaded. New berry plants may be planted to augment the existing berry plants.

Additionally, for pollination purposes, it is always a good idea to obtain plants or seeds from more than one colony, that is a colony growing at least 500 feet from another colony.

Row planting is an ideal method for commercial planting and harvesting. Soil can be prepared and seedlings planted as in commercial domestic berry fields. This makes harvesting much easier and quicker. Since it has never been done before, it is difficult to estimate the exact amount of berries that can be produced per acre.

"In established wild low bush blueberry fields, modern agriculture management practices, such as weed and pest control, can produce a crop which can consistently yield 3,000 pounds per acre. Under favorable conditions, yields of up to 8,000 pounds per acre have been realized."

http://www.wildblueberries.net/prod.html, James Bay Wild Fruit.

Although the above quote and article are from the east coast, it seems reasonable that totally optimized row planted fields of mature southeast wild berries could achieve those kinds of harvests! Proper wild stand management could possibly compete with these amounts as well depending on the density of the berry plants.

Whichever farming method best suits your particular situation can be worked to your advantage.

### 3. Berry Growing

Berries are picky about a few things. They don't like "wet feet" and the soil must be very acidic. Berries that grow naturally in the wild seem to do best in areas that have very little competing growth. The berries have a relationship with the acidic spruce and hemlock trees and grow much better in ground that has been fortified with needles, bark, shavings and chips from these trees. In the wild they often grow on the stumps of dead hemlock or spruce.

Well-drained soil is necessary. With our rainfall in southeast Alaska, these plants can get drenched, but because the coniferous organic layer cannot hold water well or for long, the tiny root systems get saturated frequently, but dry quickly and do not remain in standing water.

Wild huckleberries are much more difficult to grow, yet are often found growing side-by-side and intertwined with wild blueberries. Southeast's wild black huckleberries are the same variety that grows in Washington and Idaho—as a matter of fact; they are Idaho's state fruit. They do not seem to grow further north than Southeast, however, the Alaska Blueberry (v. Alaskensis Howell) is found as far north as Seldovia and the Aleutian Chain.

For in-depth information on Alaska's wild blueberries, there is no better resource than Dr. Pat Holloway at University of Alaska- Fairbanks (UAF). Start with the Cooperative Extension Services at <a href="http://www.uaf.edu/ces/">http://www.uaf.edu/ces/</a>. UAF has resources to help most farmers from soil testing to marketing. UAF has, without a doubt, been our most valuable resource for anything to do with wild blueberries.

Dr. Danny Barney is perhaps the best-known name in black huckleberries. Formerly with the University of Idaho's Cooperative Extension, his research records remain available at the International Wild Huckleberry Association's web site at http://wildhuckleberry.com/category/dr-dan-barneys-research/.

Hans Porter at Alaska Blues farm & nursery is quickly becoming one of the leading experts on wild berry cultivation. Alaska Blues has a website, <a href="https://www.alaskablues.net">www.alaskablues.net</a>, with a great deal of information on wild berry farming in Alaska.

Here is another publication that is very enlightening and upfront: <a href="http://www.cals.uidaho.edu/edcomm/pdf/CIS/CIS0932.pdf">http://www.cals.uidaho.edu/edcomm/pdf/CIS/CIS0932.pdf</a>, berry farming is not for sissies!

Next is a list of publications definitely worth perusal and, in many cases, are available for downloading:

This is an awesome site for the International Wild Huckleberry Association, <a href="http://wildhuckleberry.com/category/huckleberry-resources/">http://wildhuckleberry.com/category/huckleberry-resources/</a>. This site has two great publications available, Growing Western Huckleberries by Dr. Danny Barney, and The Pacific Northwest Research Station in Corvallis, Oregon and the University of Montana in Missoula A Social History of Wild Huckleberry Harvesting in the Pacific Northwest.

Alaska Blueberry Planting & Care, NorthWest Data Solutions, <a href="http://nwds-ak.com/About/Other/AlaskaBlueberryPlanting.aspx">http://nwds-ak.com/About/Other/AlaskaBlueberryPlanting.aspx</a>. Good advice; we skip the fertilizer.

Native Plants of Alaska, A Guide for Producing and Cultivating, written by Robert Gorman and Julie Roller, UAF Cooperative Extension. <a href="http://www.uaf.edu/files/ces/publications-db/catalog/anr/HGA-00232D.pdf">http://www.uaf.edu/files/ces/publications-db/catalog/anr/HGA-00232D.pdf</a>

Berry Crops written by the NRCS, <a href="http://www.uaf.edu/ces/districts/tanana/mg/manual/chapters/13-Berry-Crops.pdf">http://www.uaf.edu/ces/districts/tanana/mg/manual/chapters/13-Berry-Crops.pdf</a>.

### IV. MARKETING

One of the most important marketing tools has become the internet. Web sites, domain names and registration, all seem confusing until you do a little research at sites such as <a href="https://www.google.com/a/cpanel/domain/new">https://www.google.com/a/cpanel/domain/new</a> (for Google sites, which are incredibly easy to use) or something similar to <a href="http://websitesetupguide.com">http://websitesetupguide.com</a>. There are many instructional sites, but if you are



Chocolate-covered, wild-berry marshmallow!

considering using a professional web site designer, this is where you need to

set that in motion. There are many web site design organizations that may improve your site appearance, number of hits in search engines, etc.

If you design your web site yourself it can be inexpensive depending on, funny enough, your domain name. Many names may already be in use and if you really want that particular name/domain site, often you can make an offer for the name or be put on a waiting list. You can also purchase both the .com and .net domain sites with the same prefix and forward more than one address to your primary domain site. Keep your domain names short and as "memorable" as possible. The average domain name is \$10 per year and most domains are available at that price, but if you have a specific name, one already in use, etc., or a name that is be very popular, you may pay a one-time fee upwards of several hundred dollars. You will never need to pay that amount again unless you let your domain registration lapse.

Here are some agencies that also provide great marketing information and resources:

Nontimber Forest Product Opportunities in Alaska, <a href="http://www.fs.fed.us/pnw/pubs/pnw\_gtr671.pdf">http://www.fs.fed.us/pnw/pubs/pnw\_gtr671.pdf</a>, is an awesome document that provides excellent information on potential products and their markets.

Division of Agriculture. Alaska DNR, has some excellent publications under their Resources division of their web site, <a href="http://dnr.alaska.gov/ag/ag\_resources.htm">http://dnr.alaska.gov/ag/ag\_resources.htm</a> or contact them at 907-745-7200 for written copies of available publications.

Beginning Farmers, <a href="http://www.beginningfarmers.org">http://www.beginningfarmers.org</a>, is a great tool. This site offers many attractions including online courses for farm management and crop production, links and publications and networking opportunities. Also, previously mentioned agencies such as the SBDC, SBA, and FSA are marvelous resources for marketing plans and advice; they often provide services as a "connector," knowing of both providers and purchasers of wild berries and products.

The word ALASKA on anything is always a marketing attraction. There are great benefits to obtaining your Alaska Grown and Made in Alaska certifications.

Made in Alaska, DNR: http://www.dced.state.ak.us/ded/dev/mia/permit.htm

#### State contact:

Division of Economic Development Department of Commerce, Community, and Economic Development 550 West 7th Avenue, Suite 1770, Anchorage, AK 99501

Phone: (907) 269-8104 Fax: (907) 269-8147

### Alaska Grown, DNR:

This web site contains the certification policy and the application form: <a href="http://dnr.alaska.gov/ag/ag\_AKGrown.htm">http://dnr.alaska.gov/ag/ag\_AKGrown.htm</a>

General information about the Alaska Grown program: <a href="http://dnr.alaska.gov/ag/Marketing/AKGrownDirectorsCertificationPolicy010">http://dnr.alaska.gov/ag/Marketing/AKGrownDirectorsCertificationPolicy010</a> <a href="http://dnc.alaska.gov/ag/Marketing/AKGrownDirectorsCertificationPolicy010">http://dnr.alaska.gov/ag/Marketing/AKGrownDirectorsCertificationPolicy010</a> <a href="http://dnc.alaska.gov/ag/Marketing/AKGrownDirectorsCertificationPolicy010">http://dnr.alaska.gov/ag/Marketing/AKGrownDirectorsCertificationPolicy010</a> <a href="http://dnc.alaska.gov/ag/Marketing/AKGrownDirectorsCertificationPolicy010">http://dnc.alaska.gov/ag/Marketing/AKGrownDirectorsCertificationPolicy010</a> <a href="http://dnc.alaska.gov/ag/Marketing/AKGrow

Department of Natural Resources 550 W. 7th Ave, Suite 1260, Anchorage, AK 99501-3557

Phone: 907-269-8400 Fax: 907-269-8901

Get your products placed in local farmer's markets, natural food stores, and restaurants. If you are in an area where tourism is substantial, i.e., tour boats, ferries, etc., take advantage of that tourist trade. Internet searches for buyers and markets are constantly changing, but there are food brokerage organizations where you can register if you are selling in large quantities. Setting up a web site with a Facebook, Twitter or other social networking site can bring a lot of attention and interest to your farm, berries and/or products

beginning with your friends and family; the ability to advertise through networking is a tremendous asset. On your social page you can offer specials, post lots of pictures, and mainly get everyone to remember your name, post often, but for a reason. Join farming sites and forums and be active, ask questions. Many wild berry nurseries offer advice, assistance and encouragement, check out ones in your area. One important thing to remember is that you are supplying a very valuable product, <u>don't undersell</u> your product! Consider your market as the income bracket that can afford to purchase these expensive berries and their products, think high-end.

Our very best wishes to you for great success with your berry farm adventure!