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To: Director's Staff
Division and Office Chiefs

Date: 12/31/74

Subject:

Document: FRROSS HISTORIC LANDSCAPE Preliminary Report

The Interpretive Services Section of the Resource Preservation and Interpretation Division has written the attached recommendation which requires staff review and comment before going to the Director. Please provide us with your comments by _____

James P. Tryner, Chief
Resource Preservation and
Interpretation Division

Attachment:

cc: Director _____
District _____
Area _____
Unit _____
Project Manager _____

I have no comments on this recommendation.

My comments on this recommendation are below or attached.

(Signature)

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(Title)

FORT ROSS HISTORIC LANDSCAPE

PRELIMINARY REPORT

There are three landscape themes at Fort Ross: 1) the natural landscape and Pomo Indian ethnobotany; 2) the Russian agricultural community; 3) the American ranch and home garden. Annotated plant lists for each of these areas, a bibliography and recommendations comprise this report.

1. Natural landscape and Pomo Indian ethnobotany. The area around Fort Ross has great scenic beauty and a number of distinct native plant communities. This area provides an opportunity to interpret the relationship of the climate, land forms, and plant species, and the use by the Kashia Pomo Indians of native plants for food, fiber, medicine, and ornament. The plant list included is based on the botanic survey in the Fort Ross General Development Plan and notes on Pomo Indian ethnobotany in Heizer and Whipple.

The botanic survey for the GDP was limited. A broader survey of the biotic communities and plant species should be made. Further research on the uses of plant materials by the Kashia Pomo is recommended.

2. Russian agricultural community. The Fort Ross settlement was preceded by explorations by the Russians which included botanical studies. The settlement when established was an agricultural community, with some 50 garden plots around the Fort. There are some reports of ornamental gardens, particularly related to Princess Helena, but the evidence of these is scanty and conflicting. For example, I have been unable to

locate any primary materials on Princess Helena's "greenhouse", and the secondary materials refer to it variously as a greenhouse, a glasshouse or a sunroom, sometimes free standing, sometimes attached to the house. Before any restoration or commemoration or ornamental gardens are planned, more research will be needed. The data is very incomplete. The agricultural gardens are documented far better. Notes on the varieties grown and occasional cultural details are included in the plant list. Chernykh's essay on California agriculture supplies much more detailed information on culture and technology. Vegetable plots and grain fields could be restored quite accurately with this data. The orchards need a critical study to determine the maintenance needs of Russian and Modern trees and a critical review of the previous research.

3. The American Ranch. The plant list for this period is for the garden around the Call house, based on recollections of Mrs. Mercedes Stafford, granddaughter of Mrs. Call. The garden was a collection of five ornamentals popular at the turn of the century. Some of the best species and varieties of the time still remain in the garden and should be preserved, according to John MacGregor, horticulturist at the Huntington Museum, Library and Botanic Garden, and others. A survey of the garden should be undertaken to identify the species and delineate the layout. The ranch itself, with its orchards, fields and livestock, is described in accounts, family records and other materials - all this material should be reviewed. The Russian agriculture and land use will take precedent but the Call Ranch data should be evaluated.

In summary, the historic landscape at Fort Ross is an integration of natural history, ethnobotany, agriculture and horticulture with the related technologies. The landscape is a continuum reflecting the impact of the changing cultures. The need to research, evaluate, preserve, and restore both the natural and the created environment to complement historic structures and interpret social history is clear.

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Native Plants and Uncultivated Aliens

Achillea millefolium

Yarrow

Native of Eurasia, naturalized in some areas of California. There are also several native species. Reported in Creek vicinity at Fort Ross, but may be A. borealis, a native. May be used as medicinal herb.

Adiantum pedatum var. aleuticum

Five Finger Fern

Native, Southern California coast to Alaska in moist shaded rock crevices, woods, and canyons.

Aesculus californica

California Buckeye

Native, California coast ranges, Sierra foothills. Fruit used by Pomo Indians for fish poison, fruit can also be roasted and leached and prepared for food.

Alnus rhombifolia

White Alder

Native, California to Washington. Branches used for arrow shafts, bark for red dye by some Indians. Later uses included medicinal tea from bark for "blood purifier", stomach ache, diarrhea, tubercular hemorrhage.

Apocynum cannabinum

var. glaberrimum

Indian Hemp

Native to California. Used by Pomo Indians for netting.

Artemisia douglasiana

Mugwort

Native, Baja California to Washington, Idaho.

Asarum species

Wild Ginger

Native to California. Rootstock can be dried, candied, or boiled for ginger substitute.

Asclepias speciosa

Showy Milkweed

Native, California to Washington, Mississippi. Used by Pomo Indians for netting. Other uses include food and medicine - flowers, buds, shoots, and leaves can be boiled, brown sugar can be made by boiling down the flowers, ground seeds were used in salve for sores and snakebite, root tea was made for skin rashes.

Avena species

Wild Oats

Earliest introductions appear to be in the Spanish period. Analysis of early adobe brick samples has shown several varieties before 1800. Rapidly became a weed in California grasslands, crowding out native grass species.

Baccharis pilularis

var. consanguinea

Coyote Bush, Chaparral Broom

Native to California coast ranges. Medicinal use in lotion for eyewash.

Bromus rigidus

Ripgut grass •

Apparently introduced from Europe before 1860. Now a weed species throughout the state. Occasionally used as animal fodder but can cause digestive problems.

<u>Calypso bulbosa</u>	Native to California, North America and Eurasia.
Fairy Slipper, Lady Slipper	Found in moist areas and woods. Bulbs are edible raw, roasted or boiled. Blooms March - July.
<u>Carex species</u>	California natives. Used by Pomo Indians in basketry.
Sedge	
<u>Cercis occidentalis</u>	California native. Used by Pomo Indians in basketry. Bark tea for stomach ache. Flowers can be eaten.
Redbud	
<u>Chlorogalum pomeridianum</u>	California native. Used by Pomo Indians for fish poison. Fresh bulb also used crushed for soap substitute. Roasted bulbs for food, hot poultices for wounds.
Soap Plant, Asole	
<u>Coralorrhiza maculata</u>	California native, coast ranges to British Columbia. Orchid flower, blooms in June - August.
Coral-root	
<u>Corylus cornuta</u>	California native. Nuts eaten whole or ground.
var. <u>californica</u>	
Beaked Hazelnut	
<u>Dentaria californica</u>	California native. Rootstock can be eaten raw.
Milkmaids	

Disporum trachyandrum

Fairybells

Native to northern California. Berries are eaten by some Indians.

Dryopteris species

Wood Fern, Shield Fern

Three species native to California.

Equisetum species

Horsetails

6 species native to California. High silicon content in stems, can be used for scouring pad. Pulp in stem is edible.

Festuca idahoensis

Idaho Fescue

Native, California to British Columbia, and Colorado. Coastal grasslands.

Fragaria species

Wild Strawberry

4 native species. Edible fruit, leaves sometimes used for tea, medicine for gout.

Galium species

Bedstraw

Probably native, found California to Alaska, possibly an introduction from Europe. Seeds can be roasted and ground for coffee substitute, roots provide a purple dye. Dried plants used for mattress stuffing.

Iris douglasiana

Douglas Iris

Native to California, Santa Barbara to Oregon. Blooms March - May.

Lithocarpus densiflora

Tanbark Oak

California native, in coast ranges. High tannin content, sometimes used in tanning leathers. Acorns edible.

<u>Lolium multiflorum</u> Annual Ryegrass	Native to Europe, now a common weed species. Has been found in adobe brick samples dated as early as 1775.
<u>Lonicera species</u> Twinberry, Honeysuckle	California natives. Berries edible.
<u>Marah fabaceus</u> Manroot, Wild Cucumber	California native. Has a very large, thick tuber. One tradition records oil from seeds used as hair dressing by Spanish.
<u>Montia perfoliata</u> Miners Lettuce, Springbeauty	Native, California to Canada. Stems, leaves, and roots edible raw or boiled.
<u>Myosotis sylvatica</u> Forget-me-not	Native of Europe, long in cultivation. A garden plant often found growing wild in moist shaded places near the coast from San Mateo county north. Date of introduction to California uncertain.
<u>Myrica californica</u> Pacific Wax-myrtle	Native, California to Washington. Evergreen tree or shrub with waxy fruit.
<u>Oenothera ovata</u> Golden Eggs	Native to California coastal areas. Yellow flowers March - June.

Oxalis species

Sorrel

Several species are California natives. Others have been introduced from Peru, Chile, South Africa, and Europe. O. martiana, reported at Fort Ross, is a native of tropical America. The Spanish traded in plant materials with South America settlements and are known to have introduced many weeds and economic crops. It is possible O. martiana was introduced to Fort Ross through agricultural trade with the Spanish. It's an interesting question.

Fetasites palmata

Sweet Coltsfoot

Native to North America, wildflower.

Pinus sabiniana

Digger Pine

California native. Pomo Indians used roots in basketry. Pine seeds edible.

Polypodium species

Polypody Fern

4 species native to California.

Polystichum species

Sword Fern

6 species native to California.

Pseudotsuga menziesii

Douglas Fir

Native, California to Nevada, Canada, Rockies. Used for lumber. Needles sometimes used for tea.

Pteridium aquilinum

Native to California. Wide distribution.

var. subenseps

Bracken Fern

Quercus agrifolia

Native, California coast ranges. Important food source to Indians throughout the state.

Coast Live Oak

Acorns processed and used in soups and mushes, ground into meal. Tree also supplied bark used for dyestuff, medicine, tanning.

Ranunculus species

Native throughout West. Recorded uses include seeds for meal, roots cooked in stews, yellow dye from flowers. Can be poisonous - contains volatile oil protoanemonin.

Buttercup, Crowfoot

Rhamnus californica

California native. Berry used as coffee substitute. Bark tea medicinal.

Coffeeberry, Buckthorn

Ribes species

About 30 species native to California.

Currants and Gooseberries

Berries edible. Some very ornamental shrubs with large clusters of flowers.

Rubus species

About 12 species native to California.

Salmonberry, Thimbleberry,

Edible berries.

Blackberry

Salix species

About 30 species native to California.

Willows

<u>Sambucus coerulea</u> Blue Elderberry	Native, California to British Columbia, Rockies. Fruit edible cooked in jellies, pies. Bark tea medicinal.
<u>Scirpus species</u> Bulrush, Tule	California native. Pomo Indians used root fibers in basketry. Roots edible raw, baked, dried and ground. Pollen pressed into cakes and baked. Seeds edible whole, parched, or ground. Leaves used for mats, huts, etc.
<u>Scolopus bigelovii</u> Fetid Adder's Tongue, Pod, Brownies	California native, coast ranges Humboldt to Santa Cruz counties. Ill-scented flowers blooming in February and March.
<u>Sequoia sempervirens</u> Coast Redwood	Native to California flats and slopes in coastal fog belt. Important source of lumber; wood is light, soft, straight-grained, easily split, decay-resisting.
<u>Silybum marianum</u> Milkthistle	Native to Europe. A common and troublesome weed. Date of introduction to California uncertain.
<u>Sisyrinchium bellum</u> Blue-eyed grass	Native to Coastal California.

Smilacina sessilifolia

Slip Solomon's Seal

California native. Found on moist slopes and streambanks, coastal ranges Santa Barbara to British Columbia. Wildflower, blooms March - May.

Stellaria media

Common Chickweed

Native to Europe. Introduction date uncertain.

Stipa lepida

Foothill Needle Grass

Native to California, Baja to Humboldt County.

Stipa pulchra

Purple Needle Grass

California native, coast ranges San Diego to Humboldt Co., Sierra foothills.

Torreya californica

California Nutmeg

California native. Reported wood is heavy, strong, hard, red. Used by Indians for paddles, spear handles, bows, etc.

Trifolium species

Clovers

About 50 species in California, both native and naturalized. Greens edible. Good animal fodder.

Trillium species

Trillium, Wake Robin

Native to northern California. Greens edible. Root emetic medicine. Some Indians used root tea to medicate women in labor.

Umbellularia californica Native to California and Oregon. Leaves used
California Laurel, Oregon Myrtle as herb, spice, tea for nervousness. Red-
colored, highly grained wood for furniture,
etc.

Urtica species 5 species native to California. Used for
Nettles potherb, fiber, yellow dye from roots.

Vaccinium species 9 species native to California.
Whortleberry, Huckleberry, Berries edible.
Bilberry

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Russian Period Plants

Allium cepa

Onions

Reported at Fort Ross 1826 and 1840. Green onions mentioned by Chernykh. He states the seedlings were set out in the fields after the roots and tops were cut back. Onions were sent to the New World by the Spanish as early as 1520. The species originated in Europe.

Allium sativum

Reported at Fort Ross 1826 in Gibson. Sent to New World in 1500's, in California before 1800. Origin Europe.

Armoracia rusticana

Horseradish

Reported at Fort Ross in 1820. Gibson records weights of 36 and 48 pounds for harvested plants. No evidence of cultivation by the Spanish californians has yet been discovered. Origin Europe.

Beta vulgaris

Beets

Reported at Fort Ross, 1820, 1826, 1840's. Khlebnikoff states "Kuskof often pickled considerable quantities of beets and cabbage and sent them to Sitka." In his essay on California agriculture, Chernykh states "Under the control of the missions, there was cultivation of carrots, beets and other

vegetables, but now these are scarce."

Bests were sent by the Spanish to the New World in the 1600's. Origin Europe.

Brassica oleraceae var.

capitata: Cabbage

At Fort Ross 1820's. Kuskoff pickled cabbage and sent it to Sitka. Sent to New World by Spanish in 1600's, in California with missions. Origin Europe.

Brassica nigra

Black Mustard

Khlebnikoff wrote at Fort Ross "mustard grows wild in many places and from 3-6 poods (a pood equals 36 pounds) have been gathered and sent to Sitka in a year at the price of 20 rubles a pood. It grows wild and needs no cultivation." There is a strong evidence mustard was introduced in the Mission period; it was established in settled areas early in the 1800's, sometimes growing 8-12' tall. Origin Europe.

Brassica rapa

Turnip

Recorded at Ross in 1820's. Khlebnikoff "Radishes and turnips grow very large but are not of good flavor." Turnips weighed as much as 12 pounds each. Origin Europe.

Cannabis sativa

Hemp

Reported by Essig in his article on Fort Ross. Documentation uncertain. Hemp was grown by the Spanish Californians. Origin Europe and Asia.

Capiscum species

Peppers

Chernykh includes peppers in his list of vegetables grown in California. Not certain if they were grown at the Fort. Origin tropical America.

Citrullus vulgaris

Watermelons

Reported at Fort Ross in 1820's and 1840's. Khlebnikoff: "Watermelons, melions, and pumpkins were planted by Mr. Kuskof and in good years 800 watermelons were gathered." Chernykh: "Watermelons and melons here grow extremely large but the former do not have the same good taste as our European ones. I had an opportunity to receive some seeds from Astrakhan. The first year crop of watermelons was excellent, the second year worse, and the third year they had changed so that they could not be told from the native watermelons." Grown in California from Mission period. Origin tropics and South Africa.

Citrus bergamia

Bergamot

Khlebnikoff lists the bergamot, a small spiny tree in the Citrus family, at Bodega in 1820. The small sour fruit was used in the Old World for essential oil and perfume. These trees may have been obtained from the Spanish but it is the only reference to bergamot in California known thus far. Origin probably Asia.

Cucumis melo varieties

Reported by both Khlebnikoff and Chernykh.

Melons

Origin probably southern Asia, many cultivars.

Cucumis sativus

May have been at Fort Ross. Gibson makes a

Cucumber

note about a "good harvest" in 1826, but Chernykh states in his report "there are no cucumbers." No references to cultivation by the Spanish have been found yet. Origin Southern Asia.

Cydonia oblonga

Chernykh, writing of agriculture in California:

Quince

"fruits which grow to considerable size are apples, pears, peaches, apricots, quince, plums, etc. In general the fruits are coarse." The Spanish sent live quince plants to their settlers in Mexico in 1520. Established in Spanish California by the early 1800's. Origin Persia, Turkestan.

Daucus carota, var.

Chernykh: "Under the control of the missions there was cultivation of carrots, beets, and other vegetables but now these are scarce."

sativa: Carrot

Introduced to California by Missions.

Origin Europe.

Fagopyrum esculentum

Buckwheat

Prof. Hundry at Berkeley writes: "It seems probable that rye and buckwheat may have been direct imports from Russia since they had not been previously mentioned in California except in connection with the French La Perouse expedition and have not been found in adobe buildings of the Spanish period." Origin Europe.

Helianthus annuus

Sunflower

There is no direct evidence that the Sunflower was grown at Fort Ross, but it was very popular in Russia where it was grown for the seeds which were sold like peanuts, or pressed for oil. It is a native of North America, introduced to Europe around 1700 where many cultivars were developed.

Hordeum vulgare

Barley

A grain crop long in the New World. Christopher Columbus wrote to Queen Isabella about barley in the West Indies in 1494. Barley was established as a food crop and weed in California by 1860. Essig states there was barley at Fort Ross in 1814. Origin Europe.

Lactuca sativa

Lettuce

Essig lists lettuce early at the Fort. It was noted in Spanish California by 1798. The varieties grown are unknown. Origin Europe.

Linum usitatissimum

Flax

At Fort Ross around 1820. Introduced to California in 1790's by the Spanish. Seeds were sent to Monterey and San Jose in 1795. It was grown for fiber to make linen, and for oil from the seeds. Origin probably Asia, cultivars from Europe.

Malus sylvestris

Apple

Apples were planted by 1820. They seem to have been obtained from the Spanish at San Francisco and Monterey, but the "Russian Bellflower" variety may have been obtained from Russia directly. The Spanish were growing apples before 1800. Origin Europe.

Nicotiana tabacum

Tobacco

Essig and Bancroft both refer to cultivated tobacco in California, but the documentation is vague. Bancroft states the "quality would not compare with the east coast." Origin Tropical America.

Papaver species

Poppy

Essig refers to poppies at Fort Ross, possibly grown for poppyseed. There is no other documentation for this crop yet.

Phaseolus species

Beans

Chernykh: "Yellow beans are cultivated predominantly (in California)." The Spanish grew many kinds of beans including the garbanzo - a yellow bean.

(Cicer arietinum). Many species and varieties,
origins America and Europe.

Pisum sativum

Peas

Essig lists peas at the Fort. Peas were grown
throughout Spanish California. Origin Europe
and Asia.

Prunus avium

Cherry

Reported by Khlebnikoff 1820. Occasionally
grown by Spanish but not too successfully.
Cherries require a long cold spell for good
fruiting - the Russians in northern California
may have had better luck with them. Origin
Asia, Europe.

Prunus Armeniaca

Apricot

Listed by Chernykh among California fruits.
Not determined if they were grown at Ross.
Reported in Santa Clara and Monterey in
1830's. Origin China.

Prunus domestica

Common Plum

In Chernykh's list 1840's. Grown by Spanish
before 1800. Origin Europe.

Prunus persica

Peach

Khlebnikoff: "First peach tree was brought
from San Francisco in 1814 on the schooner
Chirikoff by Mr. Benzeman. It fruited in
1820." These peaches were commonly grown
in early California and were used to make
peach brandy as early as 1805. Origin China.

Pyrus communis

Pear

Pears were bought from Monterey in 1820.

Chernykh includes them in his list in 1840, stating "in general, the fruits are coarse."

Noted by Englishman Vancouver at Mission Santa Clara in 1792. Origin Europe.

Raphanus sativus

Radish

Khlebnikoff: "radishes and turnips grow very large but are not of good flavor."

The explorer Cortes mentions radishes in a dispatch to Spain from Mexico in 1520.

Origin Europe.

Ricinus communis

Castor Bean, Palma

Palma Christi

Khlebnikoff: "Roses were brought from San Francisco and Palma Christi from the Sandwich Islands." Oil from seeds used medicinally. Seeds poisonous. Origin Africa and tropics.

Sedale cereale

Rye

Hundry believes rye was direct import from Russia. There is no evidence of cultivation of rye in Spanish agriculture. Origin Europe.

Rosa species

Roses

Khlebnikoff: "Roses were brought from San Francisco." Certainly included the Castillian rose, a favorite of the Spanish, and possibly others. A white musk rose may have been brought to California from Peru - it is noted in Spanish records 1520. Origins China and Europe.

Solanum tuberosum

Potato

Khlebnikoff: Potatoes were planted twice a year, but the yield was not large, 6 and seldom 8 to a hill.' Chernykh: "Red potatoes are cultivated which yield more and larger than the white", but states they are not as tasty. Probably obtained from the Spanish. La perouse, during a French voyage, left the potato at Monterey in the 1830's: "The gardeners belonging to the frigates gave to the missionaries some potatoes of Chile in a state of very perfect preservation which are likely to prove hereafter of great utility to the inhabitants of this region." Origin South America.

Triticum aestivum

Wheat

Was a staple crop at Fort Ross as elsewhere. Chernykh complains of problems with "rot" and grasshoppers in wheat. Origin Europe, Asia.

Vitis species

Grape

Klebnikoff: "the grapes were good and began to bear in 1813." Some vines were imported from Peru in 1817, which bore in 1823. In 1826 there was a "well-arranged orchard with grapes." Chernykh: "Blue grapes are cultivated and yield good harvest and good taste. Vine slips are stuck in the ground and some of them bear fruit in 3-4 years. Local grapes make good wine but in small quantities and does not keep well. Wild grapes are found in large volume along

the banks of the rivers and streams. They climb up the trees to considerable height.'*
The Spanish brought grapes to California with the first settlements. Origin Europe and native.

Zea mays

Maize, Corn

Chernykh describes in detail the cultivation of corn. The varieties grown were probably the same as those grown by the Spanish - white dent, flint, sweet, and bantam. Origin tropical America. (North America too?)

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Call Ranch Garden - partial list

Based on recollections of Mrs. Call's granddaughter, Mrs. Mercedes Stafford.

<u>Acacia</u> Species	Origin tropics and temperate regions,
Acacia, Mimosa	Australia.
<u>Agapanthus africanus</u>	Origin Africa.
Mile Lily, African Lily	
<u>Althaea rosea</u>	Origin China.
Hollyhock	
<u>Amaryllis belladonna</u>	Origin South Africa.
Amaryllis, Naked Lady	
<u>Centaurea cyanus</u>	Origin southeast Europe.
Cornflower, Bachelor's	
Button	
<u>Chrysanthemum frutescens</u>	Origin Canary Islands, Europe.
Marguerites	
<u>Chrysanthemum maximum</u>	Origin North America.
Shasta Daisy	

Convallaria majolis

Origin Europe, Asia

Lily of the Valley

Dahlia species

Origin, Mexico, Guatemala, "Another

Dahlia

favorite - great variety."

Datura suaveolens

Origin Brazil, Peru, "From South America."

Datura

Delphinium species

Origin northern temperate zones.

Delphinium

Dianthus species

Origin Europe. "Sweet William."

Pinks

Fuchsia species

Origin Mexico to South America and New Zealand.

Fuchsias

"A speciality, the Columbian fuchsia among others. In 1928 we brought her one of the first white fuchsias from Buchardt Gardens, Victoria." - Fremont. Older states in a newspaper article that Mrs. Call's fuchsias were planted by the Russians. This is absolutely unsubstantiated - The earliest references to fuchsias in California appear in the 1850's and they were still considered a rarity in the 1860's.

Gladiolus species Origin South Africa, Africa, Mediterranean.
Gladiolas

Heliotropium aborescens Origin Peru.
Heliotrope

Hexerocallis species Origin Japan, China, Europe, Siberia.
Day Lily

Hydrangea macrophylla Origin China, Japan.
Hydrangea

Iris species Origin northern hemisphere.
Iris

Lavandula officinalis Origin Mediterranean.
English lavender

Lilium tigrinum Origin China, Japan.
Tiger Lily

Lobelia erinus Origin Africa.
Lobelia

Melissa officinalis Origin Europe, Asia.
Lemon Verbena, Bee Balm

Mentha species

Origin Europe.

Mints

Narcissus species

Origin Europe. "Paper whites, yellow and white, etc."

Daffodils

Hyosotis species

Origin Europe and Asia. "Many"

Forget-me-not

Papaver species

Origins - various.

Poppies

Pelargonium species

Origin Europe, South Africa. "Mrs. Call propagated new varieties - great variety

Pelargoniums, Geraniums,

"Lady Washingtons" and color"

Peruvian heather"

Also calls it "baby's breath" - maybe

species unknown

Gypsophila. Mrs. Call told Mr. Older that she got her Peruvian heather from Captain Stephen Smith who owned the Bodega ranch in 1843. However that Stephen Smith died in 1855 and Mrs. Call did not arrive at Fort Ross until 1873. Smith's wife remarried Tyler Curtis. There is a record of a son Stephen, but it is not clear if he was Smith's son or Curtis'.

Rosa species

Roses

Origin China, Europe. Mrs. Stafford lists a cabbage rose "Large pink, dark"; a green rose R. chinensis var. viridiflora, "a novelty"; Belle of Portugal, "a climbing pink rose"; Betti-up-Richard, "two-toned - light and dark pink"; Moss rose, "two colors - white and pink"; Frau Kark Druski, "white rose"; and other roses including "small early type rose - almost purple in color."

Rosmarinus officinalis

Rosemary

Origin Mediterranean.

Salix babylonica

Weeping Willow

Origin China.

Syringa vulgaris

Lilac

Origin Europe. "Several colors"

Tropaeolum majus

Nasturtium

Origin South America.

Viola cornuta

Pansies

Origin Europe.

Viola species

Violets

Origin Europe and North America.

Zantedeschia aethiopica

Callalily

Origin South Africa. "In profusion,

Enough grew in the gulch beside the

house to decorate a whole church."

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