

currently → mphamilton@berkeley.edu

now jennifer.goe@jamesreserve.edu



## JAMES SAN JACINTO MOUNTAINS RESERVE



University of California-Riverside  
PO Box 1775  
20950 Highway 243  
Lake Fulmor  
Idyllwild, CA 92549-1775

voice: (951) 659-3811  
fax: (951) 659-0553  
mobile: (951) 313-4099  
mhamilton@jamesreserve.edu

### Biological Survey of the Idyllwild County Park and Vicinity

#### METHODS

This biological resources survey was conducted between January 15, and July 18, 1994. Monthly, two-day surveys were divided into morning, late afternoon, and night periods. Walking transects and remote sensing image analysis were used to identify the nature and extent of the dominant and common vegetative associations and wildlife habitats. Birds were identified visually, with the aid of binoculars, and by their calls, during early morning and late afternoon transects. Mammals were identified visually and indirectly by tracks, scats, and burrows. Fifty trap nights were sampled using aluminum sherman live traps baited with peanut butter and wild bird seed. Mammal trapping was conducted during the months of April, May and June, simultaneously during the breeding bird spot map survey.

Nomenclature in this report follows University of California (1993) for vascular plants and Banks et al. (1987) for vertebrates. We consulted the California Natural Diversity Data Base (CNDDDB) for information on potential populations of sensitive species. They provided a topographic map (7.5 minute) overlay showing the known occurrences of any important biotic species and communities. We found this information highly dated (the most recent element occurrence was documented in 1988!) This information, as well as information from the US. Fish and Wildlife Survey (Federal Register reports of candidate threatened and endangered species), Audubon Society, and University of California James Reserve, helped to update biodiversity records for the property and local area. The following methods synthesize the approach taken for this study.

- 1) Conduct a site survey to determine property boundaries, current and past uses of the Park, proposed uses and developments for the Park, and nearby land uses.
- 2) Develop a digital database of vegetation and wildlife habitats using recently collected digital air photography (0.3 meter resolution, true color). Classify plant communities,

## Biological Survey of the Idyllwild County Park

Michael P. Hamilton

University of California-James San Jacinto Mountains Reserve

**Wintergreen** (*Pyrola picta* ssp. *integra*). The **montane riparian forest (MRF)** occurs along the main stem of Lily Creek. Floristically, the dominant species are primarily the same as the **MCF**, however, the density of trees is much greater within the riparian zone, especially considering the abundance of **incense cedar** (*Calocedrus decurrens*), **California black oak** (*Quercus kelloggii*), and **canyon live oak** (*Quercus chrysolepis*). Species unique to the **MRF** include **willow** (*Salix lasiolepis*), and **white alder** (*Alnus rhombifolia*), and numerous species of herbaceous perennials such as **Sierra current** (*Ribes nevadense*) and **monkey flower** (*Mimulus* spp.). Water was flowing during our survey. We noted a total of 51 species of vascular plants uniquely associated with the **MRF**.

**Montane Chaparral (MC)**: Nearly all of the middle and upper slopes support chaparral vegetation of various species and communities. South facing slopes tend to be more open with some rock and exposed soil showing between shrubs of **chamise** (*Adenostemma fasciculatum*), **Interior Live oak** (*Quercus wislizenii*) and **buckwheat** (*Eriogonum fasciculatum*). Less exposed slopes support dense and almost impenetrable stands of **manzanita** (*Arctostaphylos pringlei* var. *drupacea*, *A. glandulosa*), **interior live oak** (*Quercus wislizenii*), and whitethorn (*Ceanothus leucodermis*). Secondary dominants include **coffeberry** (*Rhamnus californica*), **deerbrush** (*Ceanothus intergerrimus*) and **woolly blue curls** (*Trichostemma lanatum*). **Coulter Pine** (*Pinus coulteri*) is common within older stands of montane chaparral. A total of 98 species of plants were identified in this association.

**Montane Meadows and Grasslands (MM)**: This plant community occurs on seasonally or perennially moist soils which are not dominated by tree cover. Two microhabitat types within the Park's meadow exist, a dry to mesic meadow dominated by herbaceous perennials such as **sedges** (*Carex* spp.), **rushes** (*Juncus* spp.), **deergrass** (*Muhlenbergia rigens*), **bracken** (*Pteridium aquilinum*) and **nettle** (*Urtica* spp.), and mesic to moist meadow supporting numerous grass species such as **needlegrass** (*Stipa* spp.), **Squirreltail grass** (*Sitanion hystrix*), and a great diversity of wildflowers including **Mariposa Lily** (*Calochortus* spp.) **Blue Dicks** (*Dichelostemma* spp.), **Blue Bells** (*Gila* spp.), and **Silver Lupine** (*Lupinus excubitus*). Grasslands, similar in species composition to seasonally wet meadows, are developed on openings or gaps in the mixed conifer forest and montane chaparral where sufficient soil depth provides adequate moisture retention. The Montane Meadow vegetation Association supports 73 species of vascular plant.

**Biological Survey of the Idyllwild County Park**  
 Michael P. Hamilton  
 University of California-James San Jacinto Mountains Reserve

**Table 1a.-- Protected/sensitive vertebrate species known or expected to occur near the Idyllwild Park (source: CNDDDB, 1994, USDA Forest Service, San Jacinto Ranger District, Federal Register 56:225, Nov. 21, 1991).**

<b>Element</b>	<b>Status</b>	<b>Nearest Known Location</b>
Spotted bat <i>Euderma maculatum</i>	C2, NF	observed on site
Pacific western big-eared bat <i>Plecotus townsendii townsendii</i>	C2	<5 mile from site
San Bernardino northern flying squirrel <i>Glaucomys sabrinus californicus</i>	C2	<5 mile from site
Northwestern San Diego pocket mouse <i>Perognathus fallax fallax (Chaetodipus)</i>	C2	<10 mile from site
California spotted owl <i>Strix occidentalis</i>	C2	observed on site
Southern bald eagle <i>Haliaeetus leucocephalus</i>	FE/CE	<5 miles from site
Mountain quail <i>Oreotyx pictus</i>	C2, NF	observed on site
San Diego horned lizard <i>Phrynosoma coronatum blainvillei</i>	C2	<5 mile from site
Coastal western whiptail <i>Cnemidophorus tigris umbratica</i>	C2	observed on site
Southern sagebrush lizard <i>Sceloporus graciosus vandenburgianus</i>	C2	observed on site
San Diego Mountain kingsnake <i>Lampropeltis zonata</i>	C2, CR	observed on site
San Diego ringneck snake	C2	observed on site

**Biological Survey of the Idyllwild County Park**  
 Michael P. Hamilton  
 University of California-James San Jacinto Mountains Reserve

*Diadophis punctatus similis*

Southern rubber boa <i>Charina bottae umbratica</i>	CT	<5 mile from site
--	----	-------------------

Large-blotched ensatina <i>Ensatina eschscholtzii klauberi</i>	C2	observed on site
---	----	------------------

Mountain yellow-legged frog <i>Rana muscosa</i>	C2, NF, CR	<10 miles from site
--	------------	---------------------

FE = Federally endangered, C2 = Federal Candidate 2, CE = California endangered, CT = California threatened species, CR= California rare, CNPS = California Native Plant Society (CNPS) List 1B. NF= National Forest Sensitive Species

**Biological Survey of the Idyllwild County Park**  
 Michael P. Hamilton  
 University of California-James San Jacinto Mountains Reserve

**Table 1b.-- Protected/sensitive plant species known or expected to occur near the Idyllwild Park (source: CNDDDB, 1994, USDA Forest Service, San Jacinto Ranger District, Federal Register 55:35, Feb. 21, 1990).**

Element	Status	Nearest Known Location
California bedstraw <i>Galium californicum ssp. prinum</i>	CNPS,NF	<5 mile from site
California penstemon <i>Penstemon californicus</i>	C1, CNPS, NF	<15 mile from site
Hall's Monardella <i>Monardella macrantha var. hallii</i>	CNPS, NF	<25 miles from site
Hidden Lake Blue Curls <i>Trichostemma austalmontanum ssp. compactum</i>	C1, CR, CNPS	<10 mile from site
Johnston's rock cress <i>Arabis johnstonii</i>	C2, CNPS, NF	<15 mile from site
Lemon lily <i>Lilium parryi var. parryi</i>	C2, CNPS, NF	on site
Munz's hedgehog <i>Echinocereus engelmannii var. munzii</i>	C2, CNPS, NF	<15 mile from site
Parish's chaenactis <i>Chaenactis parishii</i>	C2, CNPS	<5 mile from site
San Jacinto spiny phlox <i>Leptodactylon jaegeri</i>	C3c, CNPS,NF	<10 miles from site
Shaggy-haired alum root <i>Heuchera hirsutissima</i>	CNPS	<15 miles from site
Slender-horned spine flower <i>Dodecabama leptoceras</i>	FE, CE,NF	<15 mile from site
Tahquitz ivesia	C3c, CR,NF	<10 miles from site

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

*Ivesia callida*

Ziegler's tidy tips

C1, CNPS, NF <10 mile from site

*Layia ziegleri*

FE = Federally endangered, C2 = Federal Candidate 2, CE = California endangered, CT = California threatened species, CR= California rare, CNPS = California Native Plant Society List 1B, NF= San Bernardino National Forest Sensitive Species

## APPENDICES

### Appendix 1. -- FLORISTIC LIST FOR THE IDYLLWILD PARK AND VICINITY, IDYLLWILD, CALIFORNIA

#### VEGETATION TYPE

- F mixed conifer and oak forests
- C montane chaparral and woodlands
- R montane riparian and ravine forests
- M meadows and grassland openings

#### FREQUENCY

- common
- uncommon
- rare

#### Taxonomy:

Munz, P. A. 1974. A Flora of Southern California

University of California, 1993. The Jepson Manual Higher Plants of California

#### LYCOPODIAE Club-mosses

##### SELAGINELLACEAE Spike-moss family

*Selaginella asprella* Maxon.  
F,C uncommon C

#### EQUISETAE Horsetails

##### EQUISETACEAE Horsetails family

*Equisetum hyemale* L. var. *affine* (Engelm.) A.A. Eat.  
horsetail  
R,M common

#### FILICAE Ferns

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

ASPIDIACEAE

*Athyrium felix-femina* (L.) Roth var. *californicum*  
Butters. Lady fern  
R,M common SL

*Cystopteris fragilis* (D.) Bernh.  
Brittle fern  
R uncommon

*Polystichum munitum* (Kaulf.) Presl. subsp. *curtum* Ewan.                      Sword  
fern  
F rare

BLECHNACEAE

*Woodwardia fimbriata* Sm. in Rees.  
Chain fern  
R rare

PTERIDACEAE

*Cheilanthes covillei* Maxon.  
Lip fern  
F uncommon

*Pteridium aquilinum* (L.) Kuhn var. *pubescens* Underw.  
Bracken fern  
R,M common

CONIFERAE Cone-bearing plants

CUPRESSACEAE Cypress family

*Calocedrus decurrens* (Torr.) Florin.  
Incense-cedar  
F common

PINACEAE Pine family

*Pinus coulteri* D. Don.  
Coulter pine  
F,C common



**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

*P. jeffreyi* Grev & Balf. in A. Murr.

Jeffrey pine  
F,R common

*P. lambertiana* Dougl.

Sugar pine  
F common

ANGIOSPERMS DICOTYLEDONES Dicots

AMARANTHACEAE Amaranth family

*Amaranthus albus* L.

Tumbleweed  
F,C uncommon N

APIACEAE Carrot family

*Angelica tomentosa* Wats.

F common C

*Tauschia parishii* (Coult. & Rose) Macbr.

F,C common C

APOCYNACEAE Dogbane family

*Apocynum adrosaemifolium* L.

Indian hemp  
F,C,M uncommon SL

ASCLEPIADACEAE

*Asclepias californica* E.Greene

California milkweed  
C,M common

ASTERACEAE Sunflower family

*Achillea millefolium* L.

Yarrow  
R,M common

*Artemisia dracunculus* L.

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

- Tarragon  
M common
- A. ludoviciana* Nutt. ssp. *ludoviciana*.  
R,M common SL
- Clem. *Chrysothamnus nauseosus* (Pall.) Britton. ssp. *bernardinus* (Hall) Hall &  
F,C common SC
- Cirsium vulgare* (Savi) Ten.  
Bull thistle  
M,C uncommon N
- Corethrogyne filaginifolia* (H.&A.) Nutt. var. *glomerata* Hall.  
F,C,M common C
- Erigeron foliosus* Nutt.  
Fleabane  
F,C common C
- Eriophyllum confertiflorum* (DC.) Gray.  
Golden-yarrow  
F,C,M common C
- Gnaphalium palustre* Nutt.  
Everlasting  
M,R uncommon
- G. thermale* E. Nels.  
R,F common
- Haplopappus cuneatus* Gray.  
Wedge-leaved goldenbush  
F,C uncommon
- Hulsea vestita* Gray. ssp. *callicarpha* (Hall) Wilken.  
F,C common P
- Lessingia glandulifera* Gray. var. *glandulifera*.  
F common C
- Madia minima* (Gray) Keck.  
Minute tarweed

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

C,F common

*Solidago californica* Nutt.  
California goldenrod  
M,R,F common

*Stephanomeria virgata* Benth.  
F,C common

*Tragopogon porrifolius* L.  
Salsify  
F,C uncommon N

BETULACEAE Birch family

*Alnus rhombifolia* Nutt.  
White alder  
R common

BORAGINACEAE Borage family

*Cryptantha intermedia* (Grav) Greene.  
hiddenflower  
C,F common

*C. micrantha* (Torr.) Jtn.  
F,C common

*C. muricata* (H.&A.) Nels. & Macbr.  
F,C common C

*C. simulans* Greene  
F common

BRASSICACEAE Mustard family

*Arabis glabra* (L.) Bernh.  
Tower-mustard  
F uncommon

*A. pulchra* Jones.  
F,C common

*Erysimum capitatum* (Dougl.) Greene.

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

Wallflower  
F common

*Lepidium virginicum* L.  
Peppergrass  
M,F,C common C

*Sisymbrium altissimum* L.  
Tumble-mustard  
F,C uncommon N

*Streptanthus bernardinus* (Greene) Parish.  
San Bernardino twisted flower  
C,F uncommon SC

CAMPANULACEAE Bellflower family

*Nemacladus longiflorus* Gray. var. *longiflorus*.  
Long-flowered threadbranch  
M,F common C

*N. sigmoideus* Robbins.  
M,F uncommon C

*Triodanis biflora* (R.&P.) McVaugh.  
M,F uncommon

CAPRIFOLIACEAE Honeysuckle family

*Lonicera subspicata* H.&A. var. *johnstonii*.  
Chaparral honeysuckle  
F,C common C

CARYOPHYLLACEAE Pink family

*Sagina decumbens* (Elliot) Torrey & A.Gray ssp.  
*occidentalis* S. Wats.  
F uncommon

*Silene verecunda* S.Wats. ssp. *platylota* (Wats.) Hitch. &  
Maguire  
F,R common C

*Spergularia rubra* (L.) J.&C. Presl.

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

Sand-spurrey  
M,F uncommon N

CHENOPODIACEAE Goosefoot family

*Chenopodium berlandieri* Moq. var. *sinuatum* (J. Murr.) Wahl.  
F uncommon

*C. desiccatum* Nels. var. *leptophylloites* (J. Murr.) H.A. Wahl.  
F common SL

*C. incognitum* H.W. Wahl.  
F uncommon SL

CONVOLVULACEAE Morning-glory family

*Calystegia fulcrata* (Gray) Brummitt.  
Morning-glory  
C,M,F common C

DATISCACEAE Datisca family

*Datisca glomerata* (Presl) Baill.  
Durango root  
F,C uncommon C

ERICACEAE Heath family

*Arctostaphylos glandulosa* Eastw.  
Eastwood manzanita  
C,F common

*A. pringlei* Parry var. *drupacea* Parry.  
Pink-bracted manzanita  
F,C common

*A. pungens* HBK.  
Mexican manzanita  
C,F common

*Pterospora andromedea* Nutt.  
Pinedrops  
F common

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

*Pyrola picta* Sm.  
Wintergreen  
F common

*Sarcodes sanguinea* Torr.  
Snow plant  
F uncommon

EUPHORBIACEAE Spruge family

*Euphorbia palmeri* Engelm.  
Spurge  
M,F,C common

*E. serpyllifolia* Pers.  
F,C common

FABACEAE Pea family

*Lotus crassifolius* (Benth.) Greene.  
Thick-leaved lotus  
F,C common

*L. nevadensis* Greene.  
Nevada lotus  
F,C common

*L. oblongifolius* (Benth.) Green.  
Oblong-leaved lotus  
F,C common C

*L. strigosus* (Nutt. in T.&G.) Greene.  
F,C common C

*Lupinus concinnus* J. Agardh.  
F,C common

*L. excubitus* Jones var. *austromontanus* (Heller) C.P. Sm.  
F,C common SC

*L. formosus* Greene. var. *hyacinthinus* (Greene) C.P. Sm.  
F common SC

*L. latifolius* Agardh var. *parishii* C.P. Sm.

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

R,C common C

*L. polycarpus* Greene.  
C uncommon

*Trifolium cyathiferum* Lindl.  
M,F uncommon

*T. microcephalum* Pursh.  
F uncommon

*T. obtusiflorum* Hook.  
R,F uncommon

FAGACEAE Beech family

*Quercus chrysolepis* Liebm.  
Canyon live oak  
F,C common

*Q. dumosa* Engelm..  
California scrub oak  
C common

*Q. kelloggii* Newb.  
California black oak  
F common

*Q. wislizenii* A. DC. var. *frutescens* Engelm.  
Interior live oak  
C,F common C

GENTIANACEAE Gentian family

*Frasera parryi* Torr.  
Green gentian  
M,F uncommon

GERANIACEAE Geranium family

*Erodium cicutarium* (L.) L'Her.  
Storcksbill  
M,F,C common N

HYDROPHYLLACEAE Water-leaf family

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

*Nemophila spatulata* Cov.  
M,F common SL

*Phacelia imbricata* Greene.  
C,F common C

HYPERICACEAE St. John's wort family

*Hypericum anagalloides* Cahm. & Schlecht.  
Tinker's penny  
M,R uncommon

*H. formosum* HBK. var. *scouleri* (Hook.) Coult.  
St. John's wort  
M,R uncommon

LAMIACEAE mint family

*Mentha spicata* L. Spearmint  
R uncommon N

*Monardella lanceolata* Gray.  
Pennyroyal  
M,C,F common C

*M. nana* Gray. ssp. *tenuiflora* (Wats.) Abrams.  
F,C common P

*Scutellaria austinae* Eastw.  
Skullcap  
F common C

*Stachys rigida* Nutt. ex. Benth. ssp. *rigida*.  
Hedge-nettle  
M,R common

*T. lanatum* Benth.  
Wooly bluecurls  
C uncommon C

LAURACEAE Laurel family

*Umbellularia californica* (H.&A.) Nutt.



**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

California-bay  
F,C uncommon

LINACEAE Flax family

*Linum lewisii* Pursh.  
Flax  
M uncommon

LOASACEAE Stick-leaf family

*Mentzelia congesta* T. & G.  
M,C uncommon

MALVACEAE

*Sidalcea malvaeflora*(DC.) Benth  
Checkerbloom  
M,R uncommon

*Sphaeralcea ambigua* A. Gray var. *rosacea* Kearney  
Globemallow  
C uncommon

ONAGRACEAE Evening-primrose family

*Camissonia hirtella* (Greene) Raven.  
M,C common C

*C. intermedia* Raven.  
M,C common C

*Clarkia rhomboidea* Dougl.  
C,F common

*Epilobium brevistylum* Barb. Willow-herb  
R common SL

*E. glabberimum* Barb.  
R common SL

*E.lactiflorum* hausskn.  
R common SL

**Biological Survey of the Idyllwild County Park**

Michael P. Hamilton

University of California-James San Jacinto Mountains Reserve

*Gayophytum diffusum* T.&G. ssp. *parviflorum* Lewis & Szweykowski.

C,F common

*Oenothera hookeri* T.&G.

M,F uncommon

*Zauschneria californica* Presl. ssp. *latifolia* (Hook.) Keck.  
California-fuschia

F,C common

OROBANCHACEAE Broomrape family

*Orobanche uniflora* L. ssp. *occidentalis* Ferris

F uncommon SL

PLANTAGINACEAE Plantain family

*Plantago lanceolata* L.

Kibgrass

M,C common N

POLEMONIACEAE Phlox family

*Eriastrum densifolium* (Benth.) Mason. subsp.  
*austromontanum* (Craig) Mason.

M,F,C common SC

*Gila capitata* Sims ssp. *abrotanifolia* (Nutt. ex Greene) V. Grant.

C,F common SC

*G. ochroleuca* Jones spp. *exilis* (Gray) A. & V. Grant.

C,F uncommon SC

*G. sinuata* Dougl. ex Benth.

F uncommon

*G. splendens* Dougl. ex Lindl. spp. *splendens*.

F common C,SL

*Linanthus ciliatus* (Benth.) Greene.

M,F common

POLYGONACEAE Buckwheat family

**Biological Survey of the Idyllwild County Park**

Michael P. Hamilton

University of California-James San Jacinto Mountains Reserve

*Eriogonum apiculatum* Wats.

F common P

*E. davidsonii* Greene.

F,M,C common C

*E. fasciculatum* Benth. ssp. *paucifolium* (Benth.) Stokes.

California buckwheat

C,F common

*E. nudum* Dougl. ex Benth. var. *pauciflorum* (Wats.) Munz,

comb. nov..

C,F common SC

*E. parishii* Wats.

F uncommon C

*E. saxatile* Wats.

C,F uncommon SL

*E. wrightii* Torr. ex Benth. *membranaceum* Stokes.

M,F common SC

*Oxytheca trilobata* Wats.

C,M uncommon

*Rumex californicus* Rech. f.

R,M common

PORTULACACEAE- Purslane family

*Calyptridium monandrum* Nutt. in T.&G.

C,M uncommon

*Claytonia perfoliata* Donn.

Miner's-lettuce

F,R,M common

*C. spathulata* Dougl. ex Hook.

M,R,F common

RANUNCULACEAE Crowfoot family

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

*Aquilegia formosa* Fisch. in DC.  
Columbine  
R common

*Clematis ligusticifolia* Nutt. in T.&G.  
R,M uncommon

*Thalictrum fendleri* Engelm. ex Gray.  
Meadow-rue  
F common

**RHAMNACEAE** Buckthorn family

*Ceanothus integerrimus* H.&A. Deer brush  
C,F common C

*C. leucodermis* Greene.  
Whitethorn  
F,C common C

*C. palmeri* Trel.  
F common C

*Rhamnus californicus* Eschsch  
California Coffeeberry  
F,C,M common

**ROSACEAE** Rose family

*Adenostoma fasciculatum* H.&A.  
Chamise  
C common C

*Cercocarpus betuloides* Torrey & A. Gray var. *betuloides*  
Mountain Mahogany  
C common

*Fragaria vesca* L. ssp. *californica* (C.&S.) Standt.  
F,R common C

*Horkelia bolanderi* Gray ssp. *clevelandii* (Greene) Keck.  
F,M,R common C,NL

*Potentilla glandulosa* Lindl.

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

Cinquefoil  
M,F common

*Prunus emarginata* (Dougl.) Walp.  
Bitter cherry  
C,F common

*Rosa californica* C.&S.  
R,M common

*Rubus parviflorus* Nutt.  
Thimbleberry  
R uncommon

RUBIACEAE Madder family

*Galium angusticifolium* Nutt.  
Bedstraw  
M,C,F common

*G. aparine* L.  
C,F common N

SALICACEAE Willow family

*Salix lasiolepis* Benth. var. *lasiolepis*.  
Arroyo willow  
R common

*S. lutea* Nutt. var. *watsonii* (Bebb) Jeps.  
R common C,SL

SAXIFRAGACEAE Saxifrage family

*Lithophragma affine* Gray ssp. *mixtum* R. L. Taylor.  
Woodland-star  
M,C,F common SC

*Ribes malvaceum* Sm. var. *viridifolium* Abrams.  
Chaparral currant  
C,F uncommon SC,SL

*R. nevadense* Kell.  
Sierra currant

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

R common

*R. roezlii* Regel.  
Sierra gooseberry  
F uncommon C

**SCROPHULARIACEAE Figwort family**

*Antirrhinum coulterianum* Benth. in DC.  
Snapdragon  
M,C uncommon SC

*Castilleja martinii* Abrams. var. *martinii*.  
Paint-brush  
F,C common C

*C. stenantha* Gray.  
R,M uncommon C

*Collinsia concolor* Greene.  
Chinese houses  
C,F uncommon SC

*Cordylanthus filifolius* Nutt. ex Benth. in DC.  
Bird's-beak  
C,M,F common SC

*Keckiella ternata* (Torr. ex Gray) Straw ssp. *ternata*.  
C common SC

*Mimulus brevipes* Benth.  
Monkey-flower  
F,C,M common SC

*M. cardinalis* Dougl. ex Benth.  
Scarlet monkey-flower  
R common

*M. floribundus* Dougl. ex Lindl.  
F common

*M. fremontii* (Benth.) Gray.  
F,C common C

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

*M. guttatus* Fisch. ex DC ssp. *guttatus*.  
R common

*M. longiflorus* (Nutt.) Grant ssp. *longiflorus*  
Bush monkey-flower  
C,F common SC

*M. moschatus* Dougl. ex Lindl.  
R common

*M. pilosus* (Benth.) Wats.  
F,C common

*Pedicularis semibarbata* Gray.  
Lousewort  
F rare

*Penstemon bridgesii* Gray.  
Beard-tongue  
C,F common

*P. centranthifolius* Beneth.  
Scarlet bugler  
F,C common C

*P. spectabilis* Thurb. ex Gray.  
Showy beard-tongue  
C common SC

*Scrophularia californica* C.&S. var. *floribunda* Greene.  
C common C

*Verbascum thapsus* L.  
Common mullien  
F,M uncommon N

URTICACEAE Nettle family

*Urtica holosericea* Nutt.  
M,R common

VIOLACEAE Violet family

*Viola purpurea* Kell. not Stev.  
Violet

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

F,C common

VISCACEAE Mistletoe family

*Arceuthobium campylopodum* Engelm. in Gray.  
F common

*Phoradendron juniperinum* Engelm. ex Gray. ssp. *libocedri*  
(Englm.) Wiens.  
F common

*P. villosum* (Nutt. in T. & G.) Nutt.  
F common

MONOCOTYLEDONES Monocots

AGAVACEAE Agave family

*Yucca whipplei* Torr. ssp. *whipplei*. Our Lord's candle  
C,F common SC

AMARYLLIDACEAE Amaryllis family

*Allium burlewii* A. Davids.  
Wild onion  
C,F uncommon C,SL

*Bloomerla crocea* (Torr.) Cov. var. *crocea*.  
Golden stars  
M,F uncommon SC

*Dichelostemma pulchella* (Salisb.) Heller.  
Blue dicks  
M,F common

CYPERACEAE Sedge family

*Carex fracta* Mkze.  
Sedge  
M,F common

*C. multicaulis* Bailey.  
M,R common



**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

*C. nebrascensis* Dewey.  
R common

*Cyperus aristatus* Rottb.  
Umbrella-sedge  
R,F uncommon

*Eleocharis montevidensis* Kunth.  
Spike-rush  
R uncommon

JUNCACEAE Rush family

*Juncus balticus* Willd.  
Rush  
R common

*J. effusus* L. var. *pacificus* Fern. & Wieg.  
R uncommon

*J. kelloggii* Engelm.  
F uncommon

*J. macrandus* Cov.  
R uncommon C,SL

*J. rugulosus* Engelm.  
R uncommon SC

*J. sphaerocarpus* Nees.  
R uncommon

*Luzula comosa* E. Mey.  
Wood rush  
R,F common

LILIACEAE Lily family

*Calochortus splendens* Dougl. ex Benth.  
Mariposa-lily  
M,F,C uncommon C

*Lilium parryi* Wats.  
Lemon Lily

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

R uncommon

*Nolina parryi* S. Watson  
Beargrass  
C uncommon SC

*Yucca whipplei* Torr  
Our Lord's candle  
C,F common SC

ORCHIDACEAE Orchid family

*Corallorhiza maculata* Raf.  
Coral root  
F uncommon

*Epipactis gigantea* Dougl. ex Hook.  
Stream orchis  
R uncommon

POACEAE Grass family

*Agropyron parishii* Scribn. & Sm.  
Wheat grass  
M,F common C

*A. trachycaulum* (Link) Malte.  
M,F uncommon SL

*Agrostis scabra* Willd.  
Bentgrass  
M,R uncommon SL

*Alopecurus aequalis* Sobol.  
Foxtail  
F,M,R uncommon

*Bromus marginatus* Nees.  
Brome grass  
F,C common

*B. orcuttianus* Vasey.  
M,F common

*B. tectorum* L.

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

- Downy brome  
M,F,C common N
- Elymus glaucus* Buckl.  
Ryegrass  
R,M common
- Festuca confusa* Piper.  
Fescue  
M,F uncommon
- F. grayi* (Abrams) Piper.  
M,F uncommon
- F. megalura* Nutt.  
F common
- F. microsachys* Nutt.  
M,F uncommon
- Koeleria macrantha* (Ledeb.) Spreng.  
Junegrass  
M,F uncommon
- Muhlenbergia rigens* (Benth.) Hitchc.  
Deergrass  
C,M,F common C
- Poa annua* L.  
Wintergrass  
F uncommon N
- P. pratensis* L.  
Kentucky bluegrass  
R uncommon
- P. scabrella* (Thurb.) Benth. ex Vasey.  
F uncommon
- Sitanion hystrix* (Nutt.) J.G. Sm. var. *hystrix*.  
Squirreltail  
M,F,C common
- Stipa latiglumis* Swall.

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

Needlegrass  
C,F uncommon C,SL,SN

**Appendix 2. -- Birds observed or known to occur**

**at the Idyllwild Park and vicinity**

(Species observed are listed in **bold type** )

HABITAT TYPE

F mixed conifer and oak forests  
C montane chaparral and woodlands  
R montane riparian and ravine forests  
M meadows and grassland openings

FREQUENCY

common  
uncommon  
rare

PROTECTION CODES

**California Status (DFG):**                      **Federal Status (USFWS):**    **Other Codes:**  
**CE --State Endangered**    **FE --Federally Endangered**    **B - Blue Book (1978)**  
**CT --State Threatened**    **FT--Federally Threatened**    **I - Introduced**  
**CFP--Fully Protected**    **FP--Fully Protected**  
**CSC--Special Concern**    **FEP--Proposed Endangered**  
**SC --Watch List**            **F2--Candidate for Listing**

**Order Falconiformes**

**Golden Eagle**

F,C, uncommon CFP, CSC

**Sharp-shinned Hawk**

F,C rare CSC, B

**Cooper's Hawk**

F,R uncommon CSC,B

**Red-tailed Hawk**

F,C,M common

**American Kestrel**

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

C,M uncommonCSC

**Order Galliformes**

**California Quail**

C uncommon

**Mountain Quail**

F,C,M,R common

**Order Columbiformes**

**Band-tailed Pigeon**

F,M common

**Mourning Dove**

F,M,C common

**Order Strigiformes**

**Western Screech Owl**

F,R uncommon

**Great Horned Owl**

F,C,M,R common

**California Spotted Owl**

F,R rare FPT, SCT

**Flammulated Owl**

F rare

**Pygmy Owl**

F,M uncommon

**Saw Whet Owl**

F rare

**Order Caprimulgiformes**

**Common Poorwill**

C,F,M uncommon

**Whip-poor-will**

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

F uncommon

**Order Apodiformes**

Black Swift

R rare

**White-throated Swift**

F,M uncommon

**Anna's Hummingbird**

F,C,M,R common

**Rufous Hummingbird**

F,C,M,R common

**Calliope Hummingbird**

F,C, uncommon

Blackchinned Hummingbird

C,M rare

**Belted Kingfisher**

R rare

**Order Piciformes**

**Acorn Woodpecker**

F,C,M,R common

**Hairy Woodpecker**

F,R common

**Downy Woodpecker**

F,R uncommon

**Yellow-bellied Sapsucker**

F,R rare

**Red-breasted Sapsucker**

F,R uncommon

Williamson's Sapsucker

F rare

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

**Nuttall's Woodpecker**  
F uncommon

**White-headed woodpecker**  
F,R common

**Flicker**  
F,C,M,R common

**Order Passiformes**

**Ash-throated Flycatcher**  
F,R common

**Western Kingbird**  
F,C,M,R common

**Western Flycatcher**  
C,M,R common

**Western wood peewee**  
F uncommon

**Dusky Flycatcher**  
F,R uncommon

**Olive-sided Flycatcher**  
F,R common

**Black Phoebe**  
R common

**Western Kingbird**  
F,C,M,R common

**Violet-green Swallow**  
F,M,R common

**Stellars Jay**  
F,C,M,R common

**Scrub Jay**  
F,C,M common



**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

Pinyon Jay  
C,M uncommon

**Common Raven**  
F,C,M,R common

**Plain Titmouse**  
F,C,M common

**Bushtit**  
C common

**Mountain Chickadee**  
F,R common

**White-breasted Nuthatch**  
F,R common

**Pygmy Nuthatch**  
F,R common

**Red-breasted Nuthatch**  
F,M,R uncommon

**House Wren**  
F,C,M,R common

**Ruby-crowned Kinglet**  
F,R uncommon

**Western Bluebird**  
F,M,R common

**American Robin**  
F,M,R common

**Hermit Thrush**  
F,R common

**Yellow-rumped Warbler**  
F,C,M,R common

Wilson's Warbler

**Biological Survey of the Idyllwild County Park**  
Michael P. Hamilton  
University of California-James San Jacinto Mountains Reserve

F,C,M,R rare

**Rufous-sided Towhee**

F,C common

**California Towhee**

C uncommon

**Fox Sparrow**

F,M,R common

**Dark-eyed Junco**

F,C,M,R common

**Western Tanager**

F,C,M,R common

**Lawrence's Goldfinch**

F,C,M,R common

**Cassin's Finch**

F,C,R uncommon

**House Finch**

F,C,M,R common

**Appendix 3. -- Amphibians and reptiles observed or known to occur at the Idyllwild Park and vicinity**

*(Species observed are listed in bold type)*

**HABITAT TYPE**

F mixed conifer and oak forests  
C montane chaparral and woodlands  
R montane riparian and ravine forests  
M meadows and grassland openings

**FREQUENCY**

common  
uncommon  
rare

**PROTECTION CODES**

California Status (DFG): Federal Status (USFWS): Other Codes:

CE --State Endangered	FE --Federally Endangered	I - Introduced
CT --State Threatened	FT--Federally Threatened	
CFP--Fully Protected	FP--Fully Protected	
CSC--Special Concern	FEP--Proposed Endangered	
SC --Watch List	F2--Candidate for Listing	

**Order Anura**

**Pacific treefrog**  
F,R common

**Western Toad**  
M,R common

**Ensatina salamander (large blotched)**  
F,R uncommon

**Order Squamata**

**Western Fence Lizard**

F,C,M,R common

**Sagebrush Lizard**

F,C,M common F2

**Granite Spiny Lizard**

F,C common

**Side-blotched Lizard**

C,M common

**Western Skink**

F,C,M,R common

**Coastal Western Whiptail**

C common C2

**San Diego Alligator Lizard**

F,C,M,R common

**San Diego Horned Lizard**

C, M **uncommon** C2

**California Striped Racer**

F,C,M,R common

**San Diego Gopher Snake**

F,C,M,R common

**San Diego Mountain Kingsnake**

F,R **uncommon**

**Southern Pacific Rattlesnake**

F,C,M,R common

**Speckled Rattlesnake**

C **uncommon**

**Appendix 4. -- Mammals observed or known to occur  
at the Idyllwild Park and vicinity**

(Species observed are listed in **bold type**)

HABITAT TYPE

F mixed conifer and oak forests  
C montane chaparral and woodlands  
R montane riparian and ravine forests  
M meadows and grassland openings

FREQUENCY

common  
uncommon  
rare

PROTECTION CODES

California Status (DFG):	Federal Status (USFWS):	Other Codes:
CE --State Endangered	FE --Federally Endangered	B - Blue Book (1978)
CT --State Threatened	FT--Federally Threatened	I - Introduced
CFP--Fully Protected	FP--Fully Protected	
CSC--Special Concern	FEP--Proposed Endangered	
SC --Watch List	F2--Candidate for Listing	

**Order Insectivora**

*Sorex ornatus ornatus*  
Ornate Shrew  
F,C,M,R uncommon

*Notiosorex crawfordi crawfordi*  
Gray Shrew  
F,C,M,R common

*Scapanus latimanus occultus*  
**Broad-handed Mole**  
F,C,M,R common

**Order Chiroptera**

*Myotis thysanodes thysanodes*  
Fringed Myotis  
F,C,M,R uncommon

*Myotis californicus californicus*  
**California Myotis**  
F,C,M,R common

*Myotis volans interior*  
Long-legged Myotis  
F,C,M,R uncommon

*Eptesicus fuscus pallidus*  
**Big Brown Bat**  
F,C,M,R common

*Pipistrellus hesperus merriami*  
Western Pipistrelle  
F,C,M,R uncommon

*Plecotus townsendii pallescens*  
Western Big-eared Bat  
F,C,M,R uncommon CSC, F2

*Tadarida brasiliensis mexicana*  
**Mexican Free-tailed Bat**  
F,C,M,R uncommon

**Order Lagomorpha**

*Sylvilagus bachmani*  
**Audubons Cottontail**  
C,M common

**Order Rodentia**

*Spermophilus beecheyi nudipes*  
**California Ground Squirrel**  
F,C,M,R common

*Sciurus griseus*  
**California Gray Squirrel**  
F,C,M,R common

*Thomomys bottae nigracans*  
**Botta Pocket Gopher**  
F,C,M,R common

*Eutamias merriami*  
**Merriam's Chipmunk**  
F,C,M,R common

*Dipodomys agilis*  
**Pacific Kangaroo Rat**  
C,M common

*Perognathus fallax fallax*  
**San Diego Pocket Mouse**  
C uncommon F2

*Peromyscus californicus insignis*  
**California Mouse**  
F,C,M common

*Peromyscus maniculatus gambellii*  
**Deer Mouse**  
F,C,M,R common

*Microtus californicus sanctidiegi*  
**California Vole**  
M uncommon

**Order Ferae**

*Canis latrans lepticus*

**Coyote**

F,C,M,R common

*Urocyon cinereoargenteus californicus*

**Gray Fox**

F,C,M,R common

*Procyon lotor psora*

**Raccoon**

F,C,M,R common

*Mustela frenata latirostra*

**Long-tailed Weasel**

F,C,R uncommon

*Spilogale putorius microrhina*

**Spotted Skunk**

F,C,M,R uncommon

*Mephitis mephitis holzneri*

**Striped Skunk**

F,C,M,R common

*Felis concolor californica*

**Mountain Lion**

F,C,M,R common

*Lynx rufus californicus*

**Bobcat**

F,C,M,R common

**Order Artiodactyla**

*Odocoileus hemionus fuliginata*

**Mule Deer**

F,C,M,R common