FEDERAL AND STATE ENDANGERED SPECIES EXPENDITURES

FISCAL YEAR 1992





Compiled by U.S. Fish & Wildlife Service June 1993

Executive Summary

Purpose:

Section 18 of the Endangered Species Act (Act) of 1973 requires the Secretary of the Interior (working through the Fish and Wildlife Service) to annually report certain expenditures for the conservation of threatened and endangered species. This report presents the reported expenditures for Fiscal Year 1992.

Background:

Only those expenditures that are reasonably identifiable for a species are to be reported. All Federal agencies and those States receiving Section 6 grant-in-aid funds pursuant to the Act are asked to report. The first report for Fiscal Year 1989 reported expenditures totaling more than \$43 million for the conservation of 347 (63%) of 554 species listed as threatened and endangered as of September 30, 1989. The 1990 report tabulated expenditures totaling more than \$102 million for 477 (81%) of the 591 species listed as of September 30, 1990. The 1991 expenditures totaled almost \$177 million for 570 (89%) of the 639 threatened and endangered species. Since only a few foreign species are receiving expenditures from U.S. governmental agencies, these annual reports are largely restricted to a discussion concerning listed U.S. species.

Results:

Expenditures totaling \$291,510,910 are reported here for 679 (93%) of the 728 threatened and endangered species (Table 1). Expenditures are identified by species and reported separately for the Fish and Wildlife Service (Service), the States, and in aggregate for all other reporting Federal agencies.

The Service and 15 other Federal agencies identified expenditures for the conservation of individual threatened and endangered species. Another three agencies responded that their expenditures were not reasonably identifiable to species. Responses from all Federal agencies are included in Appendix 1. The median expenditure was \$16,000 (maximum of \$73.579 million) per species receiving at least \$100. Five species (0.7 %) accounted for 50.5 percent of all expenditures for which amounts were reported (Table 2). The number of species receiving half of each year's reported expenditures has declined in each of the 4 reporting years.

A good faith effort was again made to develop species-by-species expenditures for this report. However, the information presented still does not reflect the total national effort toward threatened and endangered species conservation and continues to present an incomplete funding picture. A significant portion of threatened and endangered species conservation activities includes law enforcement, consultation, recovery coordination and other actions that are not easily or reasonably identified to species. Accounting procedures by all agencies for most staff salaries, operations, maintenance and other support services are not recorded to species. Also not reported here are the extensive efforts of the private sector; many groups, individuals, corporations, and others have contributed a considerable amount of resources and volunteer time towards listed species.

This report tabulates seven times the expenditures (\$43 million) as the report for FY 1989, nearly triple the \$102 million of 1990, and a 65 percent increase over the 1991 amount. The Fish and Wildlife Service estimates that the bulk of these increases are from better reporting by the State and Federal agencies, with particular increased emphasis on habitat acquisitions for listed species in the past 2 years.

ENDANGERED SPECIES EXPENDITURES FISCAL YEAR 1992

PURPOSE OF THIS REPORT

The Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) (Act) was reauthorized and amended on October 7, 1988, under Public Law 100-478. A new Section 18 was added to the Act that requires the Fish and Wildlife Service (Service) on behalf of the Secretary of the Interior to report on certain expenditures on a species-by-species basis. The Section reads:

- SEC. 18. On or before January 15, 1990, and each January 15 thereafter, the Secretary of the Interior, acting through the Fish and Wildlife Service, shall submit to the Congress an annual report covering the preceding fiscal year which shall contain
- (1) the accounting on a species by species basis of all reasonably identifiable Federal expenditures made primarily for the conservation of endangered or threatened species pursuant to this Act; and
- (2) an accounting on a species by species basis of all reasonably identifiable expenditures made primarily for the conservation of endangered or threatened species pursuant to this Act by states receiving grants under Section 6.

This document constitutes the fourth report by the Service pursuant to the requirements of Section 18 of the Act. The report covers Fiscal Year 1992 (October 1991 - September 1992).

The term "State" as used in this report is defined in section 3(17) of the Act to mean any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, the Virgin Islands, Guam, and the Trust Territory of the Pacific Islands.

The term "conservation," as defined in section 3(3) of the Act, means the use of all methods and procedures necessary to bring any endangered or threatened species to the point where the measures provided for by the Act are no longer necessary--including, but not limited to, research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation. For the purposes of this report, the definition of conservation is further expanded to include any and all actions taken by Federal and State agencies on behalf of threatened or endangered species listed pursuant to the Act.

BACKGROUND

Defining "Reasonably Identifiable Expenditures"

The purpose of the above 1988 amendment was to obtain information with which to assess claims that a disproportionate effort is being made to conserve a few, highly visible species at the expense of numerous, less well-known species that may have greater need for protection. At the time of the first report, the Service met with staff of the House Merchant Marine and Fisheries Committee and the Senate Environment and Public Works Committee for clarification of the intent and purpose of the amendment. As a result of these discussions, the Service determined that a good faith effort was expected to develop and obtain data that are "reasonably identifiable" (Appendix 2). No extensive or extraordinary measures to develop exceptionally precise data were sought, nor were the reporting

agencies expected to "pro-rate" staff salaries and other normal operational and maintenance costs not directed towards a particular species.

Since it is recognized that certain expenditures would not be included, this report is not a complete representation of all Federal and State expenditures for the conservation of specific listed species. The expenditures reported in this and the preceding reports do not necessarily constitute all expenditures made for each species. This report does not present cost accounting in the sense of an accountant's ledger of credits and debits of all Federal and State funds available and their expenditure. This report does represent a compilation of those reasonably identifiable expenditures reported independently by the various Federal and the State agencies.

Coverage

Expenditures for FY 1992 are reported here for 679 threatened and endangered species (93.3 percent) of the 728 species that were listed under United States jurisdiction at 50 CFR Part 17 on September 30, 1992. A few species, which were known historically to occur in the United States but are not listed in the United States, are not included (ex. jaguar, short-tailed albatross, northern swift fox, thick-billed parrot) in the tabulation; a few reports to the Service included expenditures made in the United States on some of these unlisted populations. There were a few reports of expenditures made towards species not found in the United States, which may be found in the individual agency reports (Appendix 1).

Some vertebrate species (as defined under the Act) have more than a single listing in 50 CFR 17.11 or 17.12 when one population is listed as endangered and another as threatened (ex., gray wolf, bald eagle). For the purposes of reporting expenditures, such multiple listings have been combined. Subspecies are listed separately (ex. American and Arctic peregrine falcons) when one or more other subspecies are not listed.

The Service did not report land acquisition funds in the tables of expenditures for FY 1989. However, other Federal agencies reported habitat acquisition costs in that report, and even more was reported in the 1990 and 1991 tabulations. The Service's land acquisitions (\$24.4 million) have been included in this report, when they were identifiable to a species. The States reported a considerable increase in 1992, from \$5.7 million in 1989 to the present sum of \$131.5 million; much of that appears to have been for habitat acquisition by several of the States. Such Federal and State expenditures have greatly increased the amounts reported for many species and appear to constitute at about one-half of the 1992 total amount of \$291.5 million.

SECTION 18(1), FEDERAL EXPENDITURES

Expenditures by the Fish and Wildlife Service

The Service's operational categories of expenditures include fisheries, refuges, land acquisition, law enforcement, research, and Regional and field operations for listing, recovery, consultation, environmental contaminant and habitat conservation activities. All reasonably identifiable expenditures that could be attributed to individual species that were made by these activities have been included.

For example, reasonably identifiable expenditures for research programs included large sums for species where an intensive effort is underway to save a species from extinction (ex. whooping crane, California condor) and smaller sums where only a minor research effort exists. The Refuge program identified specific listed species as a major responsibility of certain refuges. The Columbian white-tailed deer, Key deer, Hawaiian monk seal, and masked bobwhite quail are examples of listed species where the respective National Wildlife Refuge is devoted nearly entirely to their management and recovery. Other

listed species use these and many other refuges for all or part of their life cycles. Only "dedicated" refuge expenditures that are reasonably identifiable to species are included in this report.

Listed fish species benefit from Fisheries programs, but costs are seldom identifiable to a particular species. For example, the Dexter National Fish Hatchery in Arizona has achieved a remarkable record in the propagation and maintenance of listed southwestern fishes. Attributing costs on a species by species basis for the dozen or so species managed at this facility is difficult. Few species-specific expenditures could be reasonably identified in the Law Enforcement program for specific endangered species. The Federal Aid portion under Section 6 of the Act for each species is included in the FWS TOTAL in Table 1. The State share for each species for which a Federal contribution was made is presumed to be included in the STATE TOTAL column of Table 1, as reported to the International Association of Fish and Wildlife Agencies (IAFWA).

A significant portion of the Service's funds for consultations, listing and recovery are incorporated into salaries, operations, and maintenance costs. As a result, they are not reasonably identifiable to species. Only salary, operation, and maintenance costs towards individual species coordinators (ex. whooping crane, red wolf, grizzly bear, sea turtles, sea otter) are included in this report.

Expenditures by Other Federal Agencies

A request was sent from the Service to other Federal agencies identified as likely to have some species-specific expenditures under the Act to report all reasonably identifiable expenditures. The Service provided background information identifying reasonably identifiable expenditures (Appendix 2 and copies of FY 1991 report). A number of agencies responded with letters indicating that they did not have any reasonably identifiable expenditures for individual species. Correspondence from all responding Federal agencies is included in Appendix 1. The data identified by those responding Federal agencies for individual species have been tabulated in the OTHER FED column of this report (Table 1).

SECTION 18(2), STATE EXPENDITURES

The Committees' staffs anticipated that not all States would be willing to voluntarily submit their expenditures for a variety of reasons. As a result, the Secretary was expected to only submit those expenditure figures that were voluntarily provided. In order to maximize the return of information, the assistance of the IAFWA was sought by the Service to coordinate the reporting of reasonably identifiable expenditures made by States.

The States report to the IAFWA, and the latter tabulates the data by species and provides the totals to the Service. Total States expenditures are reported in Table 1 under the column STATES TOTAL. Information was not sought or provided to the Service by the IAFWA on an individual State's expenditures or as to which States did or did not report.

SUMMARY OF DATA

Table 1 reports the reasonably identifiable expenditures for each species by the Service, other Federal agencies, and the States. Species are grouped in the same general order as they are listed in 50 CFR Part 17. This year, Table 1 also provides the rank for each species from Table 2. Table 2 ranks each species in descending order by the SPECIES TOTAL of Table 1; a cumulative, or running, total and percentage of the \$291.5 million total is also provided to assist the reader.

Expenditures are identified by species and reported separately for the Service and in aggregate for all other reporting Federal agencies and for the States (Table 1). Expenditures for Category 1 and 2 candidate species or other species not listed at 50 CFR Part 17 as of September 30, 1992, were excluded. For example, even though Congress appropriated money for the prelisting recovery of candidates, these species are not listed at 50 CFR Part 17 and, therefore, are not reported here, unless the species was listed during the year.

A total of \$291,510,910s tabulated (Table 1) in this report for FY 1992. Some 93 percent (679) of the 728 listed United States species have reasonably identifiable expenditures reported from one or more sources. Five (0.7 percent) of the species have reported expenditures that account for half (50.5 percent) of the total amount reported here (Table 2). Two of these are threatened species. Forty species (incl. four with both endangered and threatened populations) have reported expenditures exceeding \$1 million. Fifty-nine species (8.1 percent of the list) account for 90 percent of all reported expenditures (Table 2). Species receiving at least \$100 have a median expenditure of \$16,000 (max. \$73.579 million).

Below are the top 10 species with the highest reported expenditures in Fiscal Year 1992 (Table 2):

1992 RANI		STATUS	TOTAL (\$000s)	1991 RANK
1	Woodpecker, red-cockaded	E	\$73,57856 ¹	5
2	Salmon, sockeye	E	24,964.46	NA
3	Owl, northern spotted	Т	17,691.09	4
4	Mouse, Choctawahatchee beach	E	16,107.00 ¹	430
5	Turtle, loggerhead sea	Т	14,765291	11
6	Manatee, West Indian (Florida)	E	13,597.82 ^t	3
7	Eagle, bald	E,T	11,43960	1
8	Falcon, American peregrine	E	8,978.78	6
9	Bear, grizzly or brown	T	6,815.13	9
10	Tern, California least	E	6,007.14	28

The significant changes in rank between 1991 and 1992 are attributable to land acquisitions costs.

Despite the difficulties inherent in this reporting system, about 1 percent of all listed species received approximately half of the reasonably identifiable funding (Table 2). This conclusion was expected. Congress and some State legislatures identify specific appropriations for most of these species, and State and Federal natural resource managers use the public interest in these high-profile species to help protect other species in the same habitats or imperiled by the same threats. The species identified by Congress as deserving of specific appropriations are the same species that drive interest and participation in the considerable State and private sector efforts on behalf of all listed species.

A good faith effort was made to develop species by species expenditures for this report. However, the information presented again this year does not reflect the total governmental (Federal and State) effort toward threatened and endangered species conservation and presents an incomplete funding picture. Therefore, the reader is cautioned against making comparisons with other reports on threatened and endangered species expenditures beyond that which is provided below. A significant portion of

¹ The total for these species has been heavily influenced by a major land acquisition program by the State of Florida. Over \$90 million was expended for just these species. Other Florida species had acquisitions costs reporting an additional \$30-40 million. These expenditures greatly distort the ranking of these species from previous annual reports.

threatened and endangered species conservation activities at all levels includes law enforcement, consultation, recovery coordination and other actions that are not easily or reasonably funded by species. Accounting procedures for staff salaries and operational, maintenance, and other support services are not normally creditable towards individual species totals. Also, there exists significant variability among the various Federal and State agency reports.

COMPARISON TO PREVIOUS REPORTS

The amendment requiring this report was passed in the first quarter of FY 1989. The Service, other Federal agencies, and State agencies gathered the best available data with little opportunity for advance planning and coordination in that year. Subsequent reports have greatly benefited by the FY 1989 experience in planning and coordination with the reporting agencies to track such expenditures. An increase in future reported amounts is still expected as most federal and State agencies increase their capabilities to track and report such expenditures and some receive additional funds to devote to endangered or threatened species. The totals for the States may change sharply in either direction as large amounts apparently spent for land acquisitions change.

The following data are from the present and previous three reports:

<u>ITEM</u>	1989	1990	1991	1992
Federal Total (\$000s)	\$39,6387	\$96,6425	\$112,6848	\$160,0603
State Total (\$000s)	4,086.1	5,701.2	64,1267	\$131,4507
Grand Total (\$000s)	43,724.8	102,3437	176,8115	\$291,5109
No. listed species	554	591	639	728
No. with reported expenditures	347	477	570	679
Max. reported amount (\$000s)	\$3,1086	\$9,687.2	\$24,6513	\$73,5786
Median for species ≥\$100	\$11,750	\$13,150	\$12,200	\$16,000
No. with 50% of expenditures	12	10	7	5
(percentage of no. listed)	2.2%	1.7%	1.1%	0 7 %
No. with 90% of expenditures	63	58	54	59
(percentage of no. listed)	11.4%	9.8%	8.5%	81%
Rank of highest ranked vertebrate	1	1	1	1
Rank of highest ranked invertebrate	30	26	29	20
Rank of highest ranked plant	9	57	42	59

Because of better planning and coordination within the reporting agencies, this report cannot be easily compared to the 1989 or subsequent reports. The Service considers the continued increases of reported expenditures to be attributable to these better reporting procedures and in increased habitat acquisitions by Federal and State agencies. Real dollar increases or decreases cannot be accurately calculated or inferred from the overall or individual totals.

Large annual variations in the amounts reported on individual species often reflect land acquisitions and similar high cost expenditures that are not a part of normal ongoing conservation efforts. The Tumamoc globe-berry had a 1989 total of \$1,167,300and was ranked ninth of 554 species; in the 1990 report the species had a rank within the 591 species of 60 with a total of \$214,440; in the 1991 report it is ranked 116 with a total of \$69,360; and in the current report it ranked 109 of 728 species with \$152,900. In

1989, a major land acquisition took place by the Bureau of Reclamation. Similar variations for other species are to be found among the four reports.

The Service has provided previous reports on <u>estimated</u> allocations by species for the current or forthcoming years as requested by the House Appropriations Committee staff. The reader of this report is cautioned that there are important differences in the assumptions that led to each of these reports. The data in this report are considered more precise than previous reports on estimated allocations, since they represent actual expenditures. However, they may be biased, since they only include reasonably identifiable expenditures.

Table 1.

Reasonably Identifiable Federal and State Expenditures during FY 1992.

The list of species in Table 1 essentially follows the taxonomic and nomenclatural conventions used in 50 CFR Part 17 for the identification and sequence of names. For ease of reference, the alphabetized, inverted common name is provided within each group (usually Class) of animals. Thus, the gray bat is found with other bats under "Bat, gray" within mammals, and Judge Tait's mussel is found under "Mussel, Judge Tait's" within the clams. Groups of animals follow the sequence: Mammals, Birds, Reptiles, Amphibians, Fishes, and Invertebrates, which include Snails, Clams, and Arthropods (which are further divided). Plants are alphabetized by inverted common name except when there is no common name. In such cases, scientific names are provided for plants, and the phrase "=Sci.Name" is provided parenthetically.

If a reader should need other information about the names, historical range, or status of an endangered or threatened species, the species can be found in 50 CFR 17.11 (wildlife) or 17.12 (plants). The STATUS column indicates whether the species is endangered (E), threatened (T), or with two United States populations under separate classifications (E,T) [for the purposes of this report the latter are counted as single species in the number listed].

Service expenditures (FWS TOTAL) and other Federal agencies expenditures (OTHER FED) are totaled in the FED TOTAL column. The STATES TOTAL is the amount reported by the IAFWA to the Service.

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TABLE 1. Reported Expenditures (\$000) for Fiscal year 1992 for Endangered and Threatened Species

			FWS		OTHER	FED	STATES	SPECIES
	(50 GER Book 17)	STATUS	TOTAL		FED	TOTAL	TOTAL	TOTAL
RANK	SPECIES (50 CFR Part 17)							
	MAIGHAL S							
84	Bat, gray	E	\$ 29.9	\$	187.4 \$	217.3	\$ 	\$ 254.7
101	Bat, Hawaiian hoary	Ε	129.2		25.6	154.8	19.7	174.5
	Bat, Indiana	E	33.4		183.1	216.5	52.6	269.2
78	Bat, little Mariana fruit	E						
680	Bat, Hariana fruit	E	174.6		104.1	278.7		278.7
77 407	Bat, Mexican long-nosed	E	1.0		0.6	1.6		1.6
603	Bat, Ozark big-eared	E	92.3			92.3	8.1	100.4
130	Bat, Sanborn's long-nosed	E	33.6		140.9	174.5	12.0	186.5
99	Bat, Virginia big-eared	E	30.5		14.3	44.8	13.9	58.7
174	Bear, grizzly or brown	Ť	987.8		3046.7	4034.5	2780.6	6815.1
9	Bear, Louisiana black	т	166.0		82.9	248.9	11.8	260.7
83	Beaver, Point Arena mountain	E	10.0			10.0		10.0
432	Caribou, woodland	E	132.4		15.7	148.1	23.7	171.8
103	Cougar, eastern	E			3.4	3.4		3.4
556	Deer, Columbian white-tailed	Ε	207.5		4.0	211.5	2.0	213.5
89		E	371.9			371.9	8.5	380.4
69	Deer, key	E	0.5			0.5		0.5
664	Dugong Ferret, black-footed	Ε	519.8		732.6	1252.4	199.6	1451.9
22	Fox, San Joaquin kit	E	109.6		1302.8	1412.4	2.2	1414.6
25	Jaguarundi (TX, Mex. ssp.)	E	85.5		15.4	100.9	1.0	101.9
129	Jaguarundi (AZ, NM, Mex. ssp.)	E	3.3			3.3	6.5	9.8
440		E	300.0		447.9	747.9	12849.9	13597.8
6		E	2.0		0.5	2.5		2.5
574		E	16.0			16.0	11.4	27.4
260		E	2.0		37.5	39.5	16067.5	16107.0
4		E	3.4			3.4	1200.1	1203.4
33	• •	E	2.0		12.1	14.1	0.8	14.9
361	•	E	52.5		95.6	148.1	0.3	148.4
111		T			0.5	0.5	1.0	1.5
604	·	E	130.5		51.1	181.6	12.5	194.1
98			410.7		53.9	464.6		464.6
61	•	E	69.0		108.3	177.3	4387.4	4564.7
13			5.9		3.0	8.9	19.5	28.4
253		Ē	59.0		120.6	179.6	30.0	209.6
90		E	378.9)	27.7	406.6	1.0	407.6
65	· · · · · ·	- E	16.6		59.4	76.0	1.2	77.2
144	•	E	70.6		54.8	125.4	11.9	137.3
117	•	E	56.5			56.5	3.6	60.1
173	•	E	371.9)	0.5	372.4		372.4
71	•	E	181.1		32.0	213.1	0.9	214.0
88	• •	- E	44.1		97.5	141.6	1.0	142.5
114	· -	ī			1430.5	1430.5	5.0	1435.5
24	•	E						
684	•	T_	15.0)	48.9	63.9		63.9
16	-	'= E	121.0		733.7	854.7	0.8	855.5
47		T			6.8	6.8	4.1	10.9
41	Shrew, Dismai Swamp southeastern				+- -			

Idum	1 - Observe - when are					STATES	SPECIES
RANK	SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	TOTAL	TOTAL
		E		16.8	16.8	59.6	76.4
146	Squirrel, Carolina northern flying	- E	12.0		12.0	7.7	19.7
313	Squirrel, Delmarva Peninsula fox	E	12.4	39.1	51.5	34.0	85.5
138	Squirrel, Hount Graham red	E	13.0	128.4	141.4	4.3	145.7
112	Squirrel, Virginia northern flying	E	10.0		10.0	3.0	13.0
386	Vole, Amergosa	E					
680	Vole, Florida salt mersh	E	20.5	20.0	40.5	11.0	51.5
185	Vole, Hualapai Mexican	Ē		52.6	52.6	4.0	56.6
178	Whale, blue	E		686.1	686.1		686.1
50	Whale, bosheed	Ē		14.1	14.1	4.0	18.1
325	Whale, finback	E		321.3	321.3		321.3
73	• • • • • • • • • • • • • • • • • • • •	E		392.2	392.2	4.2	396.4
67	Whale, humpback	E	1.0	366.3	367.3	13.0	380.3
70	Whale, right	E	,,,	4.0	4.0	4.0	8.0
463	Whale, Sei	E	0.5	4,1	4.6	4.0	8.6
448	Whale, sperm	_	1133.4	992.8	2126.3	134.2	2260.4
18	Wolf, gray (all pop./ssp.)	E,T	516.0	145.3	661.3	0.8	662.1
56	Wolf, red	E	3.4	(43.5	3.4	1200.1	1203.4
32	Woodrat, Key Largo	E	\$7,149.7	\$12,465.4	\$19,615.1	\$39,277.1	\$58,892.2
	MANNALS subtotals	species: 65	\$7,149.7	\$12,703.7	0.5,0.0		•
	BIRDS			14.0	267.3		267.3
79	Akepa, Hawaii (honeycreeper)	E	251.3	16.0 12.0	28.2		28.2
256	Akepa, Haui (honeycreeper)	E	16.2	12.0	123.1		123.1
120	Akialom, Kaumi (honeycreeper)	E	123.1	14.0	145.5		145.5
113	Akiapolaau (honeycreeper)	_ E	129.5	16.0	3.0	5.0	8.0
463	Blackbird, yellow-shouldered	E	3.0	0.4	11.9	2.0	13.9
369	Bobwhite, masked (quail)	E	11.5	0.4	11.3	2.0	11.3
411		E	9.8	1.5	11.5	6.0	6.0
499	Caracara, Audubon's (Florida) crested	т		40.0	892.3	11.6	903.8
40	Condor, California	£	881.5	10.8	921.0	19.6	940.6
38	Coot, Hawaiian (=alae keo keo)	E	870.6	50.4	39.7	2.0	41.7
205	Crane, Mississippi sandhill	E	36.0	3.7	2224.6	27.4	2252.0
19		E	816.6	1408.0	264.5	61.4	264.5
81	Creeper, Hawaiian	E	248.5	16.0	10.2		10.2
427	a t. t. aw. b	E	10.2	9	7.3		7.3
476	Creeper, Oshu (alauwahio)	E	7.3		218.9	121.4	340.3
77	Crow, Hawaiian (falala)	É	218.9			12	281.5
	S Crow, Mariana	E	178.7	102.8	281.5		22710
680	Crow, white-necked	E			74 0		71.8
157		E	70.2	1.6	71.8	19.2	896.3
4		E	871.6	5.5	877.1	17.2	62.2
16		E	62.2		62.2	1233.7	11439.6
	7 Eagle, bald	E,T	7389.0	2816.8	10205.9	4932.4	8978.8
	8 Falcon, American peregrine	E	2475.5	1570.9	4046.4		260.7
8		T	185.7		213.4	47.3	95.2
13	The second secon	E	32.8	46.0	78.8	16.5	58.3
17		E	58.3		58.3		23.3
27	and the same of th	É	23.3		23.3	2.4	1205.4
	1 Goose, Aleutian Canada	т	1150.7		1203.2	2.1	425.7
-	4 Goose, Hawaiian (meme)	E	290.3	32.9	323.2	102.4	463.1

	SPECIES (50 CFR Part 17)	STATUS	FUS TOTAL	OTHER FED	FED TOTAL	STATES TOTAL	SPECIES TOTAL
RANK		ne n	265.8	16.0	281.8		281.8
75	Hawk, Hawaiian (IO)	- E	16.2	13.0	29.2		29.2
246	Honeycreeper, crested ('akohekohe)	ī	112.0	46.0	158.0	772.2	930.2
39	Jay, Florida scrub	E	9,8	57.8	67.6		67.6
158	Kingfisher, Guem Micronesian	E	60.0	31.6	91.6	11.0	102.6
128	Kite, Everglade snail	E		•			
680	Hellard, Hariana	E	3.3		3.3		3.3
557	Negapode, Nicronesian (La Perouse's)		8.3		8.3		8.3
458	Millerbird, Mihos (old world warbler)	E	1.0	0.5	1.5		1.5
604	Monerch, Tinian	η Τ	759.7	5.5	765.2	19.0	784.2
45	Moorhen (gallinule), Hawaiian common	E	60.8	59.3	120.1		120.1
122	Moorhen (gallinule), Mariana common	E	6.0	3712	6.0	0.5	6.5
491	Nightjar (whip-poor-will), Puerto Rico	E	18.4	12.0	30.4		30.4
242	Nukupu'u (honeycreeper)	E	4.1	12.0	4.1		4.1
535	'O'o, Kauai (= 'O'o 'A'a)(honeyeater)	E	250.7	16.0	266.7		266.7
80	'O'u (honeycreeper)	E -	3331.5	13714.6	17046.1	645.0	17691.1
3	· · · · · · · · · · · · · · · · · · ·	T	16.3	1311415	16.3	20.2	36.5
218		Ε _	926.0	360.0	1286.0	20.0	1306.0
27		E	15.2	13.0	28.2		28.2
255		Ē	133.1	48.1	181.2	37.2	218.4
86		E	16.7	12.5	29.2		29.2
246		E	2.0	12.3	2.0	54.5	56.5
179	Pigeon, Puerto Rican plain	E	381.4	864.0	1245.3	194.9	1440.2
23	Plover, piping	E,T	16.2	00-10	16.2		16.2
338		E	601.0	4.9	605.9	17.5	623.3
58		E -	159.5	3.6	163.1	1.7	164.8
106	Rail, California clapper	E	97.8	56.3	154.1		154.1
107		E	147.8	19.5	167.3	0.4	167.7
105	Rail, light-footed clapper	E _		95.3	113.1	7.0	120.2
121		E	17.8	0.5	23.7	19.5	43.2
199		T	23.2	346.0	406.0	1.0	407.0
66		E	60.0	340.0	20.0		20.0
310		E	20.0	25.0	25.0	27.0	52.0
183		E		25.0	2210		
68		T -	7/4 7	182.4	944.1	19.0	963.1
3	7 Stilt, Hawaiian (=Ae'o)	E	761.7	12.3	193.3	10.4	203.8
9	5 Stork, wood	E	181.0	56.3	66.9		66.9
16	Swiftlet, Mariana gray (=Vanikoro)	E	10.6	5849.5	6006.9	0.2	6007.1
1) Tern, California least	E	157.4	540.5	763.9	72.7	836.6
4	3 Tern, least (interior pop.)	E	223.3	2.6	45.1	23.1	68.2
15	6 Tern, roseste	E,T	42.5	2.0	4.1		4.1
53	5 Thrush, large Kausi	E	4.1		13.3		13.3
38	1 Thrush, Molokai (oloma/o)	E	13.3		6.0		6.0
49	9 Thrush, small Kausi (pusiohi)	E	6.0	44.0	30.8		30.8
24	0 Touhee, Inya brown	T -	19.8	11.0 239.6	1016.8	70.2	1087.0
3	6 Vireo, black-capped	E	777.2		2828.1	2.6	2830.7
1	5 Vireo, least Bell's	E	2046.4	781.7	2.8	5.0	2.8
56	9 Warbler (wood), Sachman's	E		2.8	1008.6	99.9	1108.4
	5 Warbler (wood), golden-cheeked	E	868.2	140.4	567.1	65.4	632.4
!	7 Warbler (wood), Kirtland's	E	376.3	190.7	10.1		10.1
43	0 Warbler (willow), nightingale reed	E	10.1		10.1		,,,,,

6.5

13.8

24.2

3.9

10.4

0.9

3.9

9.5

F

424 Salamender, Texas blind

271 Toad, Houston

	2 - a lee Evpendhurge						Page 5
Table	1 - Species Expenditures		FWS	OTHER	FED	STATES	SPECIES
SAUP	SPECIES (50 CFR Part 17)	STATUS	TOTAL	FED	TOTAL	TOTAL	TOTAL
RANK		τ	9.0	0.6	9.6	2.0	11.6
404	Toad, Puerto Rican crested	E E	426.3	0.4	426.7		426.7
63	Toad, Wyoming	_	\$484.6	\$57.4	\$542.0	\$31.6	\$573.7
	AMPHIBIANS subtotals	species: 11	3404.0	431.14	•••		
							/a E
	FISHES	т	42.5		42.5		42.5
201	Catfish, Yaqui	E		0.6	0.6		0.6
662	Cavefish, Alabama	T	50.4	25.7	76.0	5.5	81.5
140	Cavefish, Ozark	E	640.3	124.0	764.3	51.1	815.4
44	Chub, bonytail	Ε	21.5	22.0	43.5	6.7	50.2
187	Chub, Borax Lake	T	32.5	7.0	39.5		39.5
211	Chub, Chihushus	E	195.7	2687.9	2883.6	121.5	3005.1
14		T					44.0
680	-	E	5.0	35.0	40.0	1.0	41.0
208	•	Ε	11.0	17.1	28.1	11.0	39.1
214		E	33.4		33.4		33.4
231		T		1.6	1.6	14.8	16.5
336	·	T	4.8	3.0	7.8	6.0	13.8
374	•	Ť		1.1	1.1	20.0	21.2
301	• •	E	56.7	79.4	136.1	4.5	140.6
116		E	43.5	0.4	43.9	2.0	45.9
193		E	109.9	607.0	716.9		716.9
49		E	23.4		23.4	0.8	24.2
272		T		16.3	16.3	15.4	31.8
234		E	5.5		5.5	0.1	5.6
510		T	2.8	452.1	454.9	0.5	455.4
6		T	0.2		0.2		0.2
67:		E	5.5		5.5	0.1	5.6
51		E	0.2	4.0	4.2		4.2
53		E	20.0		20.0	0.6	20.6
30	- •	E	6.5	0.3	6.8	0.1	6.9
48		Ţ		0.4	0.4	4.0	4.4
53		E		1.0	1.0	15.0	16.1
33		E	57.4		57.4	16.0	73.4
	O Darter, fountain	T		4.0	4.0		4.0
	7 Darter, goldline	T	18.5	6.7	25.2		25.2
26		E					
68		T	7.0		7.0	24.0	31.0
	9 Darter, Niangum	E		287.4	287.4		287.4
	74 Darter, Okaloosa	T	7.8	1.8	9.6	16.9	26.6
	53 Darter, slackwater	T		2.4	2.4	15.1	17.5
	28 Darter, smail	E		1.6	1.6	1.0	2.6
	73 Darter, watercress	= E	19.5	4.2	23.7	8.0	31.7
	35 Gambusia, Big Bend	E					
	80 Gambusia, Clear Creek	E		5.4	5.4	8.0	13.4
	80 Gambusia, Pecos	E	0.4		0.4	8.0	8.4
	56 Gambusia, San Harcos	E	2.5	0.3	2.8	15.6	18.4
	23 Logperch, Conessuge	E	20.0	30.4	50.4	21.5	71.9
1	51 Logperch, Rosnoke	T	87.2	2.1	89.3	0.8	90.1
1	33 Madtom, Neosho	E					
6	80 Madtom, Scioto	-					

	SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATES TOTAL	SPECIES TOTAL
RANK	Sheries (an our ball 11)		9.4	3.8	13.2	15.4	28.6
251	Madtom, Smoky	E T	9.4	9.1	18.5	17.9	36.4
220	Madtom, yellowfin		16.0	54.5	70.5	6.0	76.5
145	Hinnow, Loach	T E	33.6	24.5	33.6	0.5	34.1
229	Poolfish (=Killifish), Pahrump	_	28.4		28.4		28.4
253	Pupfish, Ash Meadows Amergosa	E -	0.2	5.4	5.6	15.5	21.1
302	Pupfish, Commenche Springs	E	40.5	67.6	108.1	12.0	120.1
123	Pupfish, desert	E		32.0	58.9	2.0	60.9
172	Pupfish, Devil's Hole	E	26.9	32.0	19.5	7.5	27.0
261	Pupfish, Leon Springs	E	19.5	6.0	40.8	1.0	41.8
204	Pupfish, Owens	E	34.8	6.0	13.4		13.4
379	Pupfish, Warm Springs	Ε	13.4	1020 /	5223.4	143.0	5366.4
11	Salmon, chinook (Sacramento R. winter run)	T	1195.0	4028.4	24927.5	37.0	24964.5
2	Salmon, sockeye	E	108.0	24819.5	1.0	1.0	2.0
587	Sculpin, pygmy	т	1.0		20.5	•••	20.5
306	Shiner, beautiful	т	20.5		3.3	0.3	3.6
554	Shiner, blue	Т		3.3	63.5	V. -2	63.5
165	Shiner, Cahaba	E	58.0	5.5	23.0	5.0	28.0
257	Shiner, Cape Fear	Ε	22.5	0.5		3.0	214.4
87	Shiner, Pecos bluntnose	T	13.0	201.4	214.4 0.4	5.0	5.4
517		Ŧ		0.4		6.0	43.5
198	Spikedace	τ	10.5	27.0	37.5	1.0	23.5
277		T	22.5		22.5	8.0	61.3
170		T	2.8	50.5	53.3	2.0	23.0
281		E	21.0		21.0	5.0	23.4
278		E	18.4		18.4	0.3	22.3
288		T	22.0		22.0		21.9
292	and the street	E	16.9		16.9	5.0	2386.2
17		E	534.4	1706.4	2240.8	145.4	185.7
100		E	6.0	179.7	185.7		35.0
222		T	9.0	25.1	34.1	0.9	1200.0
34		E	269.6	766.6	1036.2	163.8	62.7
166		ε		60.7	60.7	2.0	129.2
119		E	87.2	30.0	117.2	12.0	
44		E	71.5	640.8	712.3	6.7	718.9
213		E	6.7	32.6	39.3		39.3
		Ε	467.1	704.7	1171.8	52.5	1224.3
21	6 Sucker, shortnose	E	68.5	666.1	734.6	6.7	741.3
		т	59.5	24.6	84.1	13.3	97.4
13		E	58.0	127.0	185.0	24.0	209.0
9		T	160.0	30.5	190.5	16.0	206.5
9		E	58.5	60.0	118.5	1.0	119.5
12		т	38.3	64.5	102.8	48.0	150.8
11		Т	437.9	1602.3	2040.2	69.0	2109.2
		T	1.2	6.6	7.8	30.0	37.8
	6 Trout, Little Kern golden	T	6.0	47.7	53.7	15.0	68.7
	5 Trout, Paiute cutthroat	E	84.7	108.8	193.5	10.5	204.0
9	W. Woundfin	species: 91	\$5,719.9	\$40,631.9	\$46,351.8	\$1,328.9	\$47,680.6
	FISHES subtotals VERTERRATES subtotals	species: 285		\$101,218.6	\$147,716.0	\$127,719.9	\$275,435.9

Tabk	1 - Species Expenditures						-
RANK	SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATES	SPECIES TOTAL
	INVERTEBRATES						40.
		£	4.3	5.0	9.3	1.0	10.3
425	Ambersnail, Kanab Shagreen, Magazine Mountain	T		4.0	4.0		4.0
537	Snail, Chittenango ovate amber	T	2.0		2.0	4.0	6.0
499	Snail, flat-spired three-toothed	1	2.5	1.0	3.5	0.4	3.9
541	Snail, Iowa Pleistocene	E	40.0	0.4	40.4	8.0	48.4
189	•	Ţ		0.4	0.4	2.0	2.4
577	Snail, Noonday Snails, Cahu tree (19 spp.)	E	78.0	5.0	83.0		83.0
139	Snail, painted snake coiled forest	T		0.4	0.4	14.8	15.3
353		T	119.0		119.0	0.3	119.3
125	Snail, Stock Island	E	13.2	5.6	18.8	3.0	21.8
298	Snail, tulotoma	E		0.4	0.4		0.4
673	Sneil, Virginia fringed mountain	E	7.0		7.0		7.0
485	Springsnail, Alamosa	E	5.0		5.0		5.0
525	•	Ε	5.6	1.0	6.6	17.0	23.6
276		τ	5.6	38.5	44.1	3.6	47.7
190		T		2.8	2.8	48.1	50.9
186		Ē		9.9	9.9	0.5	10.4
422	-	Ē	28.9	117.5	146.4	25.1	171.5
104		E	20000	11.5	11.5	0.5	12.0
398	•	E		0.6	0.6	0.5	1.1
646		E	1.0	11.6	12.6	0.5	13.1
384		E	3.0		3.0	16.8	19.8
312		_ E	32.7	12.5	45.2	2.0	47.2
191		E	12.0	75.8	87.8	17.1	104.9
127		E	12.0	0.3	0.3	15.1	15.4
348		E		0.5	0.5	15.1	15.6
345		E		4.7	4.7	15.1	19.9
31		E =		0.2	0.2	16.7	16.9
33		_		9.1	9.1	15.2	24.3
270		E		0.2	0.2	15.1	15.4
349	-	E	4.5		4.5	4.0	8.5
45	=	E	4.5	4.2	4.2	15.1	19.4
31		_		0.2	0.2	15.1	15.4
35		E	41.3	117.9	159.2	37.9	197.1
9	7 Pearly mussel, Higgins' eye	E	3.0	18.2	21.2	20.2	41.5
20		E -	3.0	63.1	66.1	15.1	81.3
14	1 Pearly mussel, orange-footed	E	3.0	0.2	0.2	15.1	15.4
35		€ _	11.0	42.8	53.8	18.0	71.8
15		E	5.6	72.0	5.6	16.6	22.3
28		E	7.0	0.3	0.3	15.1	15.4
34		E		0.0		15.1	15.1
35		E -	10.0	2.5	12.5	9.9	22.4
28		E	10.0	1.6	1.6	15.1	16.8
33	33 Pearly mussel, white wartyback	E		0.0	0.0	15.1	15.2
3!	56 Pearly mussel, yellow-blossom	E -		0.0		0.5	0.5
64	64 Pigtoe, Cumberland	E		U 1.1	1.1	17.1	18.3
33	24 Pigtoe, fine-rayed	E		5.9	8.9	16.6	25.6
2	67 Pigtoe, rough	E	3.0	0.7	0.7	18.1	18.8
3	20 Pigtoe, shiny	E		39.3	39.3	4.6	43.8
1	97 Pocketbook, fat	E		37.3			

IGUN	1 - Openio Experienti -					CYATES	SPECIES
RANK	SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATES TOTAL	TOTAL
420	Pocketbook, speckled	E	7.0		7.0	3.6	10.6
344	Riffleshell, tan	£		0.5	0.5	15.2	15.7
_	Rock-pocketbook, Quachita (=Wheeler's pearly)	E	42.5	0.5	43.0	8.8	51.8
184	Shell, stirrup	E		1.6	1.6		1.6
602	Spinymussel, James River (=Virginia)	E		26.5	26.5	2.7	29.2
245	Spinymussel, Tar River	E	3.0		3.0	15.0	18.0
326	Amphiped, Ray's spring	E					
680	Crayfish, cave (no common name)	E		23.6	23.6	0.2	23.8
273	-	E		0.2	0.2	14.9	15.1
358	Crayfish, Nashville	E	6.8	1.2	8.0	8.3	16.3
337	Crayfish, Shasta (=placid)	Ť		0.3	0,3	0.5	0.8
659	Isopod, Madison Cave	E	1.0		1.0	0.1	1.1
635	Isopod, Socorro	E	1.0	140.7	141.7		141.7
115	Shrimp, Alabama cave	E	3.7	6.6	10.3		10.3
425	Shrimp, California freshwater	E		50.0	50.0		50.0
188	Shrimp, Kentucky Cave	ī					
680	Shrimp, Squirrel Chimney (=Florida) cave	Ė	47.8	77.1	124.9	4.5	129.4
118	Beetle, Amer. burying (=giant carrion)	ī	47.0	0.8	0.8		0.8
660	Beetle, delta green ground	E	673.7	0.0	673.7	7.1	680.8
51		E T	9.5	7.0	16.5	3.6	20.1
309	Beetle, northeastern beach tiger		12.5	,	12.5	3.4	15.9
343		T -	673.2		673.2	7.1	680.3
52		E -	1846.0	297.4	2143.4		2143.4
20	· · · · · · · · · · · · · · · · ·	T -		0.5	15.3		15.3
352		T _	14.8	0.3	15.3		
680		E _			46.3		46.3
192		E	46.3	3.0	10.0		10.0
432		E	7.0		86.1		86.1
136		E	4.1	82.0 0.7	25.1	4.4	29.5
244		E	24.4	0.7	2.0	4.4	2.0
587		E	2.0	24.0	60.5	432.1	492.6
60		T	36.5	24.0	60.5	736.1	4,50.0
680		E		e2 A	86.1		86.1
136		E	4.1	82.0	14.4	1200.1	1214.4
29	• •	E	14.4		11.1	1200.1	11.1
413		E	9.5	1.6	40.2	1.0	41.2
207		E	15.2	25.0	0.1	1.0	0.1
678	Moth, Kern primrose sphinx	T		0.1			20.4
307	Naucorid, Ash Meadows	Ť	20.4		20.4 10.2		10.2
429	Skipper, Paumee montane	T	10.2			7.1	680.3
52	Harvestman, Bee Creek Cave	E	673.2		673.2	7.1	680.3
52	Pseudoscorpion, Tooth Cave	E	673.2		673.2		680.3
52		E	673.2		673.2	7.1	\$9,763.7
	INVERTEBRATES subtotals sp	ecies: 91	\$5,997.3	\$1,470.1	\$7,467.4	\$2,296.3	47,103.1
	PLANTS	-	1.0	2.0	3.0		3.0
566	5 Abutilon eremitopetalum (=Sci. name)	E E	1.2	2.0	3.2		3.2
563		_	1.0	1.4	2.4		2.4
577		E	10.5	1.0	11.5		11.5
40		E .		2.0	3.2		3.2
563	3 'Akoko (Chammesyce celastroides var. kaenana) E	1.2	2.0	3,6		-

RANK	SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATES TOTAL	SPECIES TOTAL
630	'Akoko (Chammesyce kuwaleana)	E	1.2		1.2		1,2
647	Alani	E	1.0		1.0		1.0
630	Alsinidendron obovatum (=Sci. name)	E -	1.2		1.2		1.2
563	Alsinidendron trinerve (=Sci. name)	E	1.2	2.0	3.2		3.2
394	Amphianthus, little	T	12.0	0.4	12.4		12.4
371	Arrowhead, bunched	E	7.0	6.9	13.9		13.9
409	Aster, decurrent false	Ţ	7.8	3.6	11.4		11.4
396	Aster, Ruth's golden	E				12.3	12.3
241	Aster, Florida golden	E		21.7	21.7	9.0	30.7
680	Aupaka	E					
630	'Awiwi	E	1.2		1.2		1.2
680	Barberry, Truckee	E					
490	Bariaco	E	5.0	1.5	6.5	0.1	6.6
478	Beaked-rush, Knieskern's	T	7.0		7.0	0.2	7.2
471	Beardtongue, Penland	E	5.2	2.5	7.7		7 .7
460	Bear-poppy, dwarf	E	5.2	2.0	7.2	1.0	8.2
499	Beauty, Harper's	E	6.0		6.0		6.0
373	Avens, spreading	E		1.5	1.5	12.3	13.8
680	Bellflower, Brooksville	E					
290	Bidens, cuneate	E	22.0		22.0		22.0
372	Birch, Virginia round-leaf	E	5.0	5.0	10.0	3.8	13.8
	Birds-in-a-nest, white	T		9.4	9.4		9.4
442 209	Bird's beak, palmete-bracted	E	1.0	39.8	40.8		40.8
399	Bird's-beak, salt marsh	E		12.0	12.0		12.0
525		E	5.0		5.0		5.0
308	44	T	5.7	13.4	19.1	1.0	20.1
367		T	14.0		14.0		14.0
484		E		5.1	5.1	2.0	7.1
393		É	1.5		1.5	11.0	12.5
292	200	T	21.9		21.9		21.9
604		T		1.5	1.5		1.5
680		E					
548		E	3.7		3.7		3.7
396		E				12.3	12.3
366		E	4.0	10.1	14.1		14.1
448		T		8.6	8.6		8.6
520		E	5.0		5.0	0.1	5.1
566		Έ		3.0	3.0		3.0
664		E		0.5	0.5		0.5
370		Ε	8.0	1.0	9.0	4.9	13.9
162		T	11.0	11.2	22.3	43.4	65.6
587		E		2.0	2.0		2.0
300		E	19.2		19.2	2.0	21.2
445		E	7.0	1.7	8.7	0.5	9.2
360		E	2.5	12.4	14.9		14.9
215		E	5.9	32.0	37.9		37.9
		E	4.0	0.6	4.6	5.5	10.1
431		E	0.6	6.9	7.5		7.5
47:	2 Cactus, bunched cory	T		0.1	0.1	5.5	5.6
	7 Cactus, Chisos Mtn. hedgehog	т	1.2	0.6	1.8	5.5	7.3
47	/ Lactus, Lillage Mail: Healtenon	•					

RANK	SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATES TOTAL	SPECIES TOTAL
469	Cactus, Cochise pincushion	T	7.5	0.4	7.9		7.9
68	Cactus, Key tree	E	391.9		391.9		391.9
274	Cactus, Knowlton	E	13.2	10.4	23.6		23.6
274	Cactus, Kuenzler hedgehog	E	9.5	11.9	21.4	2.2	23.6
601	Cactus, Lee pincushion	Ţ	1.2	0.4	1.6		1.6
457	Cactus, Lloyd's hedgehog	E	1.8	1.0	2.8	5.5	8.3
512	Cactus, Lloyd's Mariposa	T		0.1	0.1	5.5	5.6
237	Cactus, Hesa Verde	T	8.7	16.9	25.6	5.7	31.3
475	Cactus, Nellie cory	E	2.0		2.0	5.5	7.5
572	Cactus, Nichol's Turk's head	E	0.3	2.4	2.7		2.7
547	Cactus, Peebles Navajo	E	0.3	3.4	3.7		3.7
508	Cactus, San Rafael	E	1.7	4.0	5.7		5.7
330	Cactus, Siler pincushion	E	11.5	5.9	17.4		17.4
196	Cactus, Sneed pincushion	E	36.0	2.5	38.5	5.5	44.0
285	Cactus, spineless hedgehog	E	15.5	6.9	22.4		22.4
329	Cactus, Tobusch fishhook	E	12.0		12.0	5.5	17.5
236	Cactus, Unita Basin hookless	T	5.2	26.2	31.4		31.4
405	Cactus, Wright fishhook	E	0.5	11.0	11.5		11.5
441	Campion, fringed	E	9.0	0.5	9.5		9.5
555	Cape rosa	E	0.5	3.0	3.5		3.5
496	Cassia mirabilis (=Sci. name)	Ε	6.0		6.0	0.1	6.1
284	Cat's-eye, Terlingua Creek	E	17.0		17.0	5.5	22.5
292	Centaury, spring-loving	T	21.9		21.9		21.9
518	Chaffseed, American	E	3.0	2.4	5.4		5.4 13.0
387	Chaff-flower, round-leaved	E	10.0	3.0	13.0		3.7
548	Chamoesyce halemanui (=Sci. name)	É	3.7		3.7		7.5
474	Checker-mailow, pedate	E	6.5	1.0	7.5	0.1	6.1
496	Chumbo, higo	Ť	6.0		6.0	0.8	3.8
544	Cinquefoil, Robbins'	E		3.0	3.0 29.2	0.6	29.2
248	Cliff-rose, Arizona	E	3.5	25.7	29.2 6.8	4.2	11.0
414	Clover, running buffalo	E	2.0	4.8	8.2	12.7	20.9
303	Coneflower, Tennessee purple	E	6.0	2.2	10.0	16.1	10.0
432	Coyote-thistle, Loch Lomond	E	10.0		0.5		0.5
664	Cranichis ricartii (=Sci. nese)	E	0.5	2.0	2.5		2.5
574	Cress, toad-flax	E	0.5	2.0	1.0		1.0
647			1.0		1.0		
680	Cyanes superbs (=Sci. name)	E	1.3		1.3		1.3
612	•	E	0.5	5.5	6.0		6.0
499	Cycladenia, Jones	Ė	10.0	2.0	12.0		12.0
399	Cypress, Santa Cruz	T	2.0	2.0	2.0	0.2	2.3
580	Daisy, takeside	E	70.2	4.0	74.2		74.2
148		E	7.0	4.0	7.0	0.1	7.1
481	Daphnopsis hellerana (=Sci. name)	E	7.0	0.6	7.6	5.5	13.1
385		E	1.2	0.0	1.2		1.2
630		E	5.5		5.5	5.5	11.0
417		E	8.0	1.2	9.2	0.2	9.4
443		E	3.7		3.7		3.7
548		E	1.3		1.3		1.3
612	-	E	2.0		2.0	0.1	2.1
585	Erubia	-	2.4				

RANK	SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATES TOTAL	SPECIES TOTAL
410	Evening-primrose, Antioch Dunes	Ē	11.4		11.4		11.4
514	Evening-primrose, Eureka Valley	E	3.5	2.0	5.5		5.5
269	Evening-primrose, San Benito	T	11.0	14.0	25.0		25.0
367	Fern, Alabema streak-sorus	Ţ	7.0	7.0	14.0		14.0
171	Fern, Aleutian shield	E	21.0	40.0	61.0		61.0
182	Fern, American hart's-tongue	T	4.0	35.5	39.5	12.6	52.1
636	Fern, Elfin tree	E	1.0		1.0	0.1	1.1
217	Fiddleneck, Large-flowered	E	37.0		37.0		37.0
469	Fleabane, Rhizome	T	7.5	0.4	7.9		7.9
161	Four-o'clock, MacFarlane's	E	52.1	13.6	65.7	1.0	66.7
392	Frankenia, Johnston's	E	7.0		7.0	5.5	12.5
647	Gahnia langiensis (=Sci. name)	E	1.0		1.0		1.0
200	Gardenia, Hawaiian (na'u)	E	22.0	2.0	24.0	18.7	42.7
461	Geocarpon minimum (=Sci. name)	Ť	6.6	0.5	7.1	1.0	8.1
499	Geranium, Hawaiian red-flowered	E	6.0		6.0		6.0
331	Gerardia, sandplain	E	16.5	0.3	16.8	0.5	17.3
587	Gilia, Monterey	£	2.0		2.0		2.0
109	Globeberry, Tumamoc	E	25.5	126.6	152.1		152.1
553	Goetzea, beautiful (metabuey)	E	3.0	0.6	3.6	0.1	3.7
391	Goldenrod, Blue Ridge	Ţ		0.4	0.4	12.3	12.7
498	Goldenrod, Houghton's	Ţ	2.0	3.1	5.1	1.0	6.1
314	Goldenrod, Short's	E	11.0	8.6	19.6		19.6
359	Goldenrod, white-haired	ī	13.0	2.0	15.0		15.0
327	Goldfields, Burke's	E	17.9		17.9		17.9
494	Gooseberry, Niccosukee (Florida)	ĭ	1.8	3.5	5.3	1.0	6,3
577	Gouania hillebrandii (=Sci. name)	E		2.4	2.4		2.4
612	Gouania meyenii (=Sci. name)	E	1.3		1.3		1.3
514	Grass, Eureka Dune	E	3.5	2.0	5.5		5.5
680	Grass, Solano	E					
375	Grass, Tennessee yellow-eyed	E	7.0	5.6	12.6	1.0	13.6
661	Groundsel, San Francisco Peaks	Ţ	0.3	0.4	0.7		0.7
264	Ground-plum, Guthrie's	E	26.0		26.0		26.0
292	Gumplant, Ash Headows	– T	21.9		21.9		21.9
638	Haha (Cyanea lobata)	E	1.1		1.1		1.1
638	Haha (Cyanea mceldouneyi)	E	1.1		1.1		1.1
630	Haha (Cyanea pinnetifida)	Ε	1.2	-	1.2		1.2
432	Haplostachya, narrow-leaved	E	8.0	2.0	10.0		10.0
243	Harperella	Ε	11.3	17.0	28.3	1.2	29.5
680	Ha/fuale	E					
463	Heartleaf, dwarf-flowered	T	7.0		7.0	1.0	8.0
292	Heather, mountain golden	T	7.9	14.0	21.9		21.9
537	Hedyotis, Na Pali beach	E	2.0	2.0	4.0		4.0
612	Hedyotis degeneri (=Sci. name)	E	1.3		1.3		1.3
612	Hedyotis pervula (=Sci. name)	E	1.3		1.3		1.3
612	Hesperomennia arbuscula (=Sci. name)	E	1.3		1.3		1.3
612		E	1.3		1.3		1.3
520	Higuero de Sierra	E	5.0		5.0	0.1	5.1
647	Holly, Cook's	E	1.0		1.0		1.0
222	Hypericum, highlands scrub	E _				35.0	35.0
	Ihi'ihi	E	11.0		11.0		11.0
710		_			-		

RANK	SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATES TOTAL	SPECIES TOTAL
604	Ilex sintenisii (=\$ci. name)	E	0.5	1.0	1.5		1.5
587	Iliau, dwarf	E	2.0		2.0		2.0
587	Indian paintbrush, San Clemente Island	E		2.0	2.0		2.0
195	Iris, dwarf lake	Ţ	4.2	3.1	7.3	37.4	44.7
463	Irisette, white	PART E	8.0		8.0		8.0
317	Ivesia, Ash Meadous	T	18.9		18.9		18.9
149	Jouelflower, California	E	8.6	65.0	73.6		73.6
412	Joint-vetch, sensitive	T =	3.0	4.3	7.3	3.8	11.1
612	Kamakahala	Ε	1.3		1.3		1.3
210	Kauai hau kushiwi	Ε	19.0	2.0	21.0	19.0	40.0
638	Kio'ele	E	1.1		1.1		1.1
291	Kokio, Cooke's	£	1.2	2.0	3.2	18.7	21.9
282	Koki'o (=hau-hele'ula or Hawaii tree cotton)	E	20.8	2.0	22.8		22.8
638	Kofokofolau	E	1.1		1.1		1.1
432	Koʻolos'ula	E	8.0	2.0	10.0		10.0
612	Kutu' f	E	1.3		1.3		1.3
417	Ladies'-tresses, Navasota	E	4.5		4.5	6.5	11.0
135	Ladies'-tresses, Ute	T	51.5	35.7	87.2	1.5	88.7
315	Lagu, Hyan	E	17.5	2.0	19.5		19.5
587	Larkspur, San Clemente Island	E		2.0	2.0		2.0
542	Layia, beach	E	1.9	2.0	3.9		3.9
680	Lead-plant, Crenulate	E					
405	Leather flower, Alabama	E	10.0	1.5	11.5		11.5
508	Leather flower, Morefield's	E		5.7	5.7		5.7
531	Lepanthes eltorensis (=Sci. name)	E	0.5	4.0	4.5		4.5
638	Liliwai	E	1.1		1.1		1.1
452	Lily, Minnesota trout	E	5.4	0.4	5.8	2.7	8.5
232	Lipochaeta venosa (=Sci. name)	E	11.0		11.0	21.9	32.9
680	Liveforever, Santa Berbara Island	E					
612	Lobelia nilhauensis (=Sci. name)	E	1.3		1.3		1.3
212	Locoweed, Fassett's	T		3.0	3.0	36.4	39.4
177	Lomatium, Bradshaw's	E	19.0	28.8	47.8	10.0	57.8
85	Loosestrife, rough-leaved	Ε	6.0	229.5	235.5		235.5
362	Lousewort, Furbish	E	11.9		11.9	3.0	14.9
680	Lupine, clover	E		7			
463	Lupine, scrub	E	8.0		8.0		8.0
647	Lysimachia lydgatei (=Sci. name)	E	1.0		1.0		1.0
587	Mahoe	E		2.0	2.0		2.0
167	Mallow, Kern	E	24.6	38.0	62.6		62.6
432	Mallow, Peter's Mountain	E	6.0	1.0	7.0	3.0	10.0
534	Manaca, palma de	T	4.0		4.0	0.1	4.1
399	Manioc, Walker's	Ε	11.5	0.5	12.0		12.0
680	Manzanita, Presido (=Raven's)	E					
569	Ma'oli'oli	E	2.8		2.8		2.8
180	Meadoufoam, Butte County	E	14.5	40.0	54.5		54.5
447	Meadowfoam, Sebastopol	E	8.9		8.9		8.9
478	Meadowrue, Cooley's	E	7.0		7.0	0.2	7.2
96	Mesa-mint, San Diego	E	30.0	170.0	200.0		200.0
680	Milkpes, Smell's	E					
143	Milkweed, Mead's	Ţ	12.9	62.3	75.2	2.5	77.7

Table 1 - Species Expenditures Page 13							
RANK	SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATES TOTAL	SPECIES TOTAL
335	Milkweed, Welsh's	T	4.5	10.0	14.5	2.0	16.5
487	Milk-vetch, Ash meadows	T	6.9		6.9		6.9
574	Milk-vetch, heliotrope	T	0.5	2.0	2.5		2.5
495	Milk-vetch, Jesup's	E	6.0		6.0	0.2	6.2
304	Milk-vetch, Mancos	E	6.4	12.9	19.3	1.5	20.8
427	Milk-vetch, Osterhout	E	5.2	4.5	9.7	0.5	10.2
249	Milk-vetch, Sentry	E	4.0	25.0	29.0		29.0
680	Mint, Garrett's (=scrub, in part)	É					
680	Mint, Lakele's	E					
680	Mint, Longspurred	E					
680	Mint, scrub	E					
363	Monkey-flower, Michigan	Ε	13.0	1.3	14.3	0.5	14.8
154	Monkshood, northern wild	Ť	31.0		31.0	39.4	70.4
680	Mustard, Carter's	E					
421	Mustard, slender-petaled	E	6.5	4.0	10.5		10.5
432	Naupaka, dwarf	E	8.0	2.0	10.0		10.0
612	Na'ena'e	E	1.3		1.3		1.3
481	Negra, cobana	T	7.0		7.0	0.1	7.1
647	Nehe (Lipochaeta kamolensis)	E	1.0		1.0		1.0
557	Nehe (Lipochaeta lobata var. leptophylia)	E	1.3	2.0	3.3		3.3
612	Nehe (Lipochaeta tenuifolia)	E	1.3		1.3		1.3
612	Neraudia angulata (=Sci. name)	E	1.3		1.3		1.3
299	Niterwort, Amergosa	E	21.4		21.4		21.4
638	Nohoanu	E	1.1		1.1		1.1
446	Oak, Hinckley's	T	3.5		3.5	5.5	9.0
638	'Oha wai	E	1.1		1.1		1.1
612	Opuhe	E	1.3		1.3		1.3
395	Orchid, eastern prairie fringed	T	4.8		4.8	7.5	12.3
108	Orchid, western prairie fringed	T	68.4	69.5	137.9	15.0	152.9
604	Palo colorado	E	0.5	1.0	1.5		1.5
604	Palo de jazmin	E	0.5	1.0	1.5		1.5
585	Palo de Nigua	E	2.0		2.0	0.1	2.1
587	Palo de Ramon	E	2.0		2.0		2.0
557	Pamakani	E	1.3	2.0	3.3		3.3
341	Panicgrass, Carter's	E	16.0	7	16.0		16.0
680	Paupau, beautiful	E					
677	Pawpaw, four-petal	E				0.1	0.1
415	Pampan, Rugel's	E	11.0		11.0		11.0
520	Petos del diablo	E	5.0		5.0	0.1	5.1
390	Pennyroyal, McKittrick	T	2.5	4.7	7.2	5.5	12.7
382	Pennyroyal, Todsen's	E	9.2	2.1	11.3	2.0	13.3
203	Penstemon, blowout	E	25.1	12.5	37.6	4.5	42.1
636	Peperomia, Wheeler's	E	1.0		1.0	0.1	1.1
238	Phacelia, clay	E	10.2	21.0	31.2		31.2
548	Phacelia, North Park	E	0.2	3.5	3.7		3.7
259	Phlox, Texas trailing	E	22.0		22.0	5.5	27.5
647	Phyllostegia glabra var. lanaiensis (=Sci. name) E	1.0		1.0		1.0
612	Phyllostegia mollis (=Sci. name)	E	1.3		1.3		1.3
265	Pink, swamp	T	4.8	15.5	20.3	5.6	25.9
525	Pinkroot, gentian	E	5.0		5.0		5.0

RANK	SPECIES (50 CFR Part 17)	STATUS	FUS TOTAL	OTHER FED	FED Total	STATES TOTAL	SPECIES TOTAL
516	Pitaya, Davis' green	E				5.5	5.5
519	Pitcher-plant, Alabama canebrake	£	2.0	3.4	5.4		5.4
233	Pitcher-plant, green	E	15.0	5.3	20.3	12.3	32.6
680	Pitcher-plant, mountain sweet	E					
222	Plum, scrub	E				35.0	35.0
548	Poa siphonoglossa (=Sci. name)	E	3.7		3.7		3.7
159	Pogonia, small whorled	E	21.8	38.0	59.8	7.4	67.2
680	Polygala, tiny	E					
157	Pondberry	E	14.0	33.6	47.6	20.3	67.9
610	Pondweed, Little Aguja Creek	E	1.4		1.4		1.4
252	Poppy, Sacramento prickly	E	5.5	21.3	26.8	1.7	28.5
451	Poppy-mallow, Texas	E	2.6	0.5	3.1	5.5	8.6
228	Potato-bean, Price's	T	12.0	10.0	22.0	12.5	34.5
377	Prairie-clover, leafy	E	9.0	4.0	13.0	0.5	13.5
678	Prickly-apple, fragrant	E				0.1	0,1
520	Prickly-ash, St. Thomas	E	5.0		5.0	0.1	5.1
587	Primrose, Maguire	T	2.0		2.0		2.0
463	Quillwort, black spored	E		5.5	5.5	2.5	8.0
499	Quillwort, met-forming	E		5.0	5.0	1.0	6.0
582	Rattleweed, hairy	E	2.0		2.0	0.2	2.2
458	Reed-mustard, Barneby	E	3.3	5.0	8.3		8.3
530	Reed-mustard, clay	T	1.8	3.0	4.8		4.8
680	Restya, Haui	E					. 12
529	Remya kausiensis (=Sci. name)	E	2.8	2.0	4.8		4.8
569	Remya montgomeryi (=Sci. name)	E	2.8		2.8		2.8
673	Rhododendron, Chapman	E		0.4	0.4		0.4
444	Ridge-cress (=pepper-cress), Barneby	E	7.2	2.0	9.2		9.2
461	Rock-cress, McDonald's	E	0.4	7.7	8.1		8.1
378	Rock-cress, shale barren	E	5.5	2.5	8.0	5.4	13.4
520	Rosa, palo de	E	5.0		5.0	0.1	5.1
680	Rosemary, Cumberland	T			45.5		13.5
376	Roseroot, Leedy's	Т	12.9		12.9	0.7	8.5
454	Rush-pea, slender	E	2.5	0.5	3.0	5.5	3.0
566	Sandalwood, Lanai or 'iliahi	E -	3.0		3.0	12.3	13.3
383	Sandwort, Cumberland	E -	D/ F	1.0	1.0 24.5	10.9	35.4
221	• •	E	24.5		1.3	10.9	1.3
612	Sanicula mariversa (=Sci. name)	E	1.3		16.0		16.0
341	•	É E	16.0 0.2		0.2		0.2
675	Schiedea haleakalensis (=Sci. name)	_		2.0	3.3		3.3
557		E	1.3 7.0	2.0	7.0	0.1	7.1
481	Schoepfia arenaria (=Sci. name)	E T	0.8	1.4	2.2	• • • • • • • • • • • • • • • • • • • •	2.2
581	Sedge, Navajo	E	1.3	2.0	3.3		3.3
557	•	E T	1.3	2.0	1.1		1.1
638	Silversword, Haleekala ('ahinahina)	E	79.0		79.0		79.0
142	•	Ť	,7.0	10.4	10.4		10.4
422	Skullcap, Florida	E		14.4	14.4	12.3	26.7
262	Skuticap, large-flowered	E		1747	.717		
680	Snakeroot	E				6.5	6.5
492	-	E	1.9		1.9		1.9
599	Spineflower, Howell's	£	107		12.5		

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RANK	SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATES TOTAL	SPECIES TOTAL
222	Spineflower, stender-horned	E		35.0	35.0		35.0
599	Spineflower, Sonome	Ε	1.9		1.9		1.9
230	Spiraea, Virginia	T	14.7	3.4	18.0	16.0	34.0
59	Spurge, deltoid	E				556.7	556.7
680	Spurge, Garber's	r					
664	Spurge, telephus	T		0.5	0.5		0.5
402	Stenogyne, narrow-leaved	E	8.0	3.9	11.9		11.9
544	Stenogyme campanulata (=Sci. name)	E	3.8		3.8		3.8
499	Stenogyne kanehoana (=Sci. name)	E	6.0		6.0		6.0
91	Summer, Michaux's	Ε	5.0	204.0	209.0	0.1	209.1
471	Sunflower, Schweinitz's	E	3.0	3.7	6.7	1.0	7.7
292		7	21.9		21.9		21.9
389	Sumshine, Sonome (=Stickyseed, Baker's)	E	12.9		12.9		12.9
664	Ternstroemia subsessilis (=Sci. name)	E	0.5		0.5		0.5
612	Tetramolopium filiforme (=Sci. name)	E	1.3		1.3		1.3
557	Tetramolopium lepitodum app. lepitodum ((=\$ci. name)E	1.3	2.0	3.3		3.3
647	Tetramolopium remyi (=Sci. name)	E	1.0		1.0		1.0
168	Thistle, Pitcher's	T	6.2	18.3	24.5	38.0	62.5
202	Thistle, Sacramento Mountains	T	5.2	36.9	42.1		42.1
680	Thornmint, San Hateo	Ε					
365	Torreya, Fiorida	E	7.0	0.9	7.9	6.4	14.3
487	Townsendia, Last Chance	T	4.9	2.0	6.9		6.9
	Tree, pygmy fringe	E				35.0	35.0
	Trillium, persistent	E	1.8	5.4	7.2	1.2	8.4
	Trillium, relict	E	1.7	3.1	4.8	1.6	6.4
478	Twinpod, Dudley Bluffs	Ţ	5.2	2.0	7.2		7.2
280	Uhfuhf	E	21.2	2.0	23.2		23.2
250	Vetch, Hawaiian	E	9.3		9.3	19.5	28.8
612	Viola helense (=Sci_name)	E	1.3		1.3		1.3
647	Viola lanaiensis (=Sci. name)	E	1.0		1.0		1.0
610	Wallflower, Contra Costa	Ε	1.4		1.4		1-4
507	Wallflower, Menzies'	E	1.9	4.0	5.9		5.9
664	Warea, wide-leaf	E				0.5	0.5
664	man promise promise and an arrangement of the contract of the	Т		0.5	0.5		0.5
680	Water-willow, Cooley's	E					
	Vause'iole	E	1.0		1.0		1.0
	Whitlow-wort, papery	т				35.0	35.0
582		E	0.2	2.0	2.2		2.2
		1	0.5	0.4	0.9		0.9
219		E	28.0	0.5	28.5	8.0	36.5
	Wireweed	E					
	Wire-lettuce, Malheur	Ε	8.9	10.0	18.9		18.9
	Woolly-star, Hoover's	T	9.6	55.0	64.6		64.6
	Woolly-star, Santa Ana River	E	5.0	53.0	58.0		58.0
	Wooly-threads, San Joaquin	E	8.6	67.0	75.6		75.6
	Xylosma crenatum (=Sci. name)	E	3.8		3.8		3.8
680	Ziziphus, florida	E					
	PLANTS subtotals	species: 352	\$2,574.1	\$2,302.7	\$4,876.8	\$1,434.4	\$6,311.3

TOTALS species: 728 \$55,068.8 \$104,991.4 \$160,060.3 \$131,450.7 \$291,510.9