

Appendix V: Baseline Biological Data

Table 1: Plants of the Vaca Project Area, 2005

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Table 4: Birds of the Vaca Project Area

Table 5: Mammals of the Vaca Project Area, 2005

Appendix V Table 1: Plants of the Vaca Project Area, 2005

Family	Species	Common name
Adiantaceae		
	Adiantum tenerum	Maidenhair fern
Anacardiaceae		
	Astronium graveolens	Jobillo, Glassy wood
	Metopium brownei	Black Poisonwood, Chechem
	Spondias radlkoferi	Hogplum
Annonaceae		
	Xylopia frutescens	Polewood
Apocynaceae		
	Plumeria obtusa	Wild frangipani, flor de mayo
	Stemmadenia donnell-smithii	Cojeton
	Tabernaemontana alba	Dog balls
Araceae		
	Anthurium sp.	Birds' nest 'fern'
	Philodendron sp.	Philodendron
	Syngonium sp.	
Arecaceae		
	Attalea cohune	Cohune
	Bactris mexicana	Pokenoboy -red fruit
	Chamaedorea ernesti-augustii	Xate
	Chamaedorea oblongata	Xate macho
	Chamaedorea sp.	
	Cryosophila stauracantha	Escoba palm
	Desmoncus orthacanthos	Bayal, basket tie tie, stay-a-while
	Euterpe precatoria	Mountain cabbage palm
	Sabal mauritiiformis	Bay-leaf, Botan
	Schippia concolor	Mountain palmeto, Mis
Asclepiadaceae		
	Asclepias curassavica	Asclepias
Asteraceae		
	Neurolaena lobata	Jackass bitters
Bignoniaceae		
	Tabebuia chrysantha	Cortes / Yellow mayflower
	Tabebuia rosea	Mayflower
Bombacaceae		
	Bernoullia flammea	Mapola / Santo Domingo
	Ceiba aesculifolia	
	Ochroma pyramidale	Balsa, polak

Family	Species	Common name
	Quararibea funebris	Guayabillo
Boraginaceae		
	Cordia gerascanthus	Barillo
	Cordia sp.	
Bromeliaceae		
	Aechmea sp.	Bromeliad (red-flowering)
	Bromelia plumieri	Pinuela
	Tillandsia spp.	Air-plants
Burseraceae		
	Bursera simaruba	Gumbo limbo
	Protium copal	Copal
Cactaceae		
	Selenicereus testudo	Devil's gut cactus
Cecropiaceae		
	Cecropia peltata	Trumpet, Warumo
Combretaceae		
	Bucida buceras	Bullet Tree, Pucte
	Terminalia amazonia	Nargusta
Costaceae		
	Costus sp.	Costus
Clusiaceae		
	Calophyllum brasiliense	Santa maria
	Clusia sp.	
	Vismia camparaguey	Wild annato
Cyperaceae		
	Rhynchospora cephalotes	Armadillo grass
	Scleria bracteata	Cutting grass
Dilleniaceae		
	Davilla sp.	
Dioscoreaceae		
	Dioscorea sp.	Chiny yam
Euphorbiaceae		
	Dalechampia	Pica-pica
Fabaceae		
Caesalpinioideae		
	Schizolobium parahyba	Quamwood
Mimosoideae		
	Acacia collinsii	Subin
	Inga affinis	Bri-bri
	Inga sp.	Inga
	Lysiloma latisiliquum	Salam

Family	Species	Common name
	Machaerium sp.	Tiger claw
	Mimosa pudica	Sensitive weed
	Mimosa tarda	Sensible weed
	Pithocellobium sp.	Pithocellobium
Papilionoideae	Acosmium panamense	Billy webb
	Gliricidia maculata	
	Gliricidia sepium	Madre de Cacao
	Lonchocarpus castilloi	Cabbage Bark, machich
	Mucuna sp.	Deer eye, horse eye
	Platymiscium dimorphandrum	Granadillo
	Swartzia cubensis	Catalox, yura-sangre, bastard tambran
Flacourtiaceae		
	Zuelania guidonia	Water Wood, Tamai, John Crow Wood
Heliconiaceae		
	Heliconia sp.	Heliconia
Loganiaceae		
	Strychnos sp.	Chicoloro
Malpighiaceae		
	Byrsonima bucidifolia	Craboo
Malvaceae		
	Hampea stipitata	Majagua
Marantaceae		
	Calathea sp.	
Melastomaceae		
	Miconia sp.	Miconia
Meliaceae		
	Cedrela odorata	Spanish cedar
	Swietenia macrophylla	Mahogany
Moraceae		
	Brosimum alicastrum	Ramon, Breadnut
	Castilla elastica	Rubber tree
	Ficus sp.	Higo
	Ficus sp.	Fig
	Ficus spp.	Fig
	Pseudolmedia sp.	Cherry
	Trophis racemosa	Yaxox, Red breadnut, White ramon
Myrtaceae		
	Calyptanthus sp.	Riparian shrub

Family	Species	Common name
	Eugenia sp.	Eugenia
	Pimenta dioica	Allspice
Nyctaginaceae		
	Pisonia aculeata	Tiger claw
Onagraceae		
	Ludwigia sp.	Clavos
Orchidaceae		
Passifloraceae		
	Passiflora coriacea	Batwing
	Passiflora xiikzodz	Batwing
Piperaceae		
	Piper auritum	Cowfoot, Xmacolan
	Piper hispidum	Cordoncillo
	Piper sp.	Piper
Polygonaceae		
	Coccoloba belizensis	Bob
	Coccoloba sp.	Coccoloba
Rubiaceae		
	Alibertia edulis	Wild guava
	Guettarda combsii	Glassy wood, tastab
	Hamelia patens	Polly red head, Ixcanan
	Psychotria poeppigiana	Hot lips
Rutaceae		
	Zanthoxylum sp.	Prickly yellow
Sapindaceae		
	Cupania sp.	
Sapotaceae		
	Chrysophyllum mexicanum	Chiceh
	Manilkara zapota	Sapote
	Pouteria campechiana	Mammee cerillo
	Pouteria sp.	Pouteria
Simaroubaceae		
	Simarouba glauca	Negrilo
Solanaceae		
Sterculiaceae		
	Guazuma ulmifolia	Bay cedar, pixoy
Verbenaceae		
	Lantana camara	Lantana, Oregano del monte
	Stachytarpheta jamaicensis	Stachytarpheta
	Vitex gaumeri	Yaxnik

Family	Species	Common name
Vochysiaceae		
	Vochysia hondurensis	Yemeri
Zamiaceae		
	Zamia sp.	Zamia

Appendix V Table 2: Fish Species of the Vaca Project Area, 2005

Fish Identified		Survey Points					Mollejon
Common Name	Scientific Name	Site A			Site B		
		A(1)	A(2)	A(3)	B(1)	B(2)	
Central Tetra, Billum	<i>Astyanax aeneus</i>	X	X		X	X	X
Two-spot Livebearer	<i>Heterandria bimaculata</i>	X		X	X	X	
Mountain Molly	<i>Poecilia teresae</i>	X	X	X	X		X
Green Swordtail	<i>Xiphophorus helleri</i>				X	X	X
Yellowbelly Cichlid	<i>Cichlasoma salvini</i>	X	X	X	X	X	X
Blue-eye Cichlid	<i>Cichlasoma spilurum</i>	X	X	X	X	X	X
Mountain Mullet	<i>Agonostomus monticola</i>	X	X		X	X	X

Appendix V Table 3: Reptiles and Amphibians of the Vaca Project Area, 2005

Family	Species	English Name
Plethodontidae	<i>Bolitoglossa mexicana</i>	Mexican Mushroomtongue Salamander
Leptodactylidae	<i>Leptodactylus melanonotus</i>	Sabinal Frog
Bufonidae	<i>Bufo marinus</i>	Cane Toad
	<i>Bufo valliceps</i>	Gulf Coast Toad
Hylidae	<i>Agalychnis callidryas</i>	Red-eyed Treefrog
	<i>Hyla microcephala</i>	Yellow Treefrog
	<i>Smilisca baudinii</i>	Common Mexican Treefrog
Ranidae	<i>Rana vaillanti</i> (palmipes)	Rainforest Frog
Crocodylidae	<i>Crocodylus moreletii</i>	Morelet's Crocodile
Kinosternidae	<i>Kinosternon leucostomum</i>	White-lipped Mud Turtle
Eublepharidae	<i>Coleonyx elegans</i>	Yucatan Banded Gecko
Gekkonidae	<i>Sphaerodactylus millepunctatus</i>	Spotted Dwarf Gecko
Corytophanidae	<i>Basiliscus vittatus</i>	Brown Basilisk
	<i>Corytophanes cristatus</i>	Smoothhead Helmeted Basilisk
	<i>Corytophanes hernandezii</i>	Hernandez's Helmeted Basilisk
Iguanidae	<i>Iguana iguana</i>	Green Iguana
Phrynosomatidae	<i>Sceloporus variabilis</i>	Rosebelly Lizard
Polychrotidae	<i>Anolis lemurinus</i>	Ghost Anole
Teiidae	<i>Ameiva festiva</i>	Middle American Ameiva
	<i>Ameiva undulata</i>	Rainbow Ameiva
Boidae	<i>Boa constrictor</i>	Boa Constrictor
Colubridae	<i>Coniophanes imperialis</i>	Black-striped Snake
	<i>Dryadophis melanolomus</i>	Lizard Eater
	<i>Imantodes cenchoa</i>	Blunthead Tree Snake
	<i>Oxybelis aeneus</i>	Mexican Vine Snake
Elapidae	<i>Micrurus diastema</i>	Variable Coral Snake
Viperidae	<i>Atropoides nummifer</i>	Jumping Pitviper
	<i>Bothrops asper</i>	Fer-de-Lance
* denotes species seen on access road between Sites A & B		
** denotes species not recorded in this survey, but recorded by L. Gentle		

Appendix V Table 4: Birds of the Vaca Project Area, 2005

Birds of the Vaca Area, 2005 / 1				
Species		Status	Habitats	Endemism
Great Tinamou	Tinamus major	fP	BFM,BFL	
Little Tinamou	Crypturellus soui	fP	SC	MA
Thicket Tinamou	Crypturellus cinnamomeus	cP	BFL	
Bare-throated Tiger-Heron	Tigrisoma mexicanum	uP	WL,LA	
Great Blue Heron	Ardea herodias	fP	WL,LA	
Great Egret	Ardea alba	cP	WL,LA	
Little Blue Heron	Egretta caerulea	vP	WL,LA	
Green Heron	Butorides virescens	cP	LA	
Yellow-crowned Night-Heron	Nyctanassa violacea	uP	LA	
Boat-billed Heron	Cochlearius cochlearius	uP	LA	
White Ibis	Eudocimus albus	uP	WL	
Black Vulture	Coragyps atratus	vP	O	
Turkey Vulture	Cathartes aura	vP	O	
King Vulture	Sarcoramphus papa	fP	BFL	
White Hawk	Leucopternis albicollis	uP	BFL,O	
Common Black-Hawk	Buteogallus anthracinus	uP	SC,O	
Roadside Hawk	Buteo magnirostris	cP	SC,SA,O	
Snail Kite	Rostramus sociabilis	oP	WL, LA	
Orange-breasted Falcon	Falco deiroleucus	lP	BFM,PFM	
Collared Forest-Falcon	Micrastur semitorquatus	fP	BFM,BFL	
Laughing Falcon	Herpetotheres cachinnans	fP	PW,SC,SA	
Plain Chachalaca	Ortalis vetula	cP	BFL,BFM,SC	
Crested Guan	Penelope purpurascens	uP	BFM,BFL	
Great Curassow	Crax rubra	uP	BFM,BFL	
Gray-necked Wood-Rail	Aramides cajanea	fP	WL	
Pale-vented Pigeon	Columba cayennensis	cP	BFL,PW,SC	
Scaled Pigeon	Columba speciosa	fP	BFM,BFL	
Red-billed Pigeon	Columba flavirostris	cP	BFL,PW	
Short-billed Pigeon	Columba nigrirostris	cP	BFM,BFL	
Ruddy Ground-Dove	Columbina talpacoti	cP	SC	
Blue Ground-Dove	Claravis pretiosa	cP	BFM,BFL	
White-tipped Dove	Leptotila verreauxi	cP	BFM,BFL	
Bird Species Survey, Lenny Gentle (2005)				
Status (Lenny Gentle)		Habitat Preferences within the Vaca Project Area		
Legend		Legend (Adapted from Jones and Vallely, 2001)		
v = very common	P = permanent resident	BFM	Submontane broadleaf forest	
c = common	S = seasonal resident	BFL	Lowland broadleaf forest	
f = fairly common	V = visitor	PFM	Submontane pine forest	
u = uncommon	T = transient (migrant)	PFL	Lowland pine forest	
r = rare	W = winter resident	SC	Scrub, low second growth	
o = occasional	X = one or two records only	SA	Savanna	
l = local		WL	Wetland habitats with emergent vegetation	
Regional Endemics		LA	Lagoons, ponds, rivers, streams	
Legend (L. Jones)		O	Overhead/aerial	
MA Middle America Endemic				
NMA Northern Middle America Endemic				

Birds of the Vaca Area, 2005 / 2				
Species		Status	Habitats	Endemism
Gray-chested Dove	Leptotila cassini	cP	BFM,BFL	
Olive-throated Parakeet	Aratinga nana	vP	BFM,BFL,SC	MA
White-crowned Parrot	Pionus senilis	cP	BFM,BFL	MA
Red-lored Parrot	Amazona autumnalis	vP	BFL	
Yellow-lored Parrot	Amazona xantholora	mP	BFL, SA	
Mealy Parrot	Amazona farinosa	cP	BFM,BFL	
Squirrel Cuckoo	Piaya cayana	cP	BFM,BFL	
Groove-billed Ani	Crotophaga sulcirostris	vP	SC	
Vermiculated Screech-Owl	Otus guatemalae	uP	BFM,BFL	
Spectacled Owl	Pulsatrix perspicillata	uP	BFM,BFL	
Central American Pygmy-Owl*	Glaucidium griseiceps	uP	BFM,BFL	
Ferruginous Pygmy-Owl	Glaucidium brasilianum	fP	BFM,BFL,SC	
Mottled Owl	Ciccaba virgata	cP	BFM,BFL	
Lesser Nighthawk	Chordeiles acutipennis	uW	SA,O	
Common Pauraque	Nyctidromus albicollis	cP	BFM,BFL	
Vaux's Swift	Chaetura vauxi	cP	O	
Long-tailed Hermit	Phaethornis superciliosus	cP	BFM, BFL	
Little Hermit	Phaethornis longuemareus	cP	BFM, BFL	
Green-breasted Mango	Anthracothonax prevostii	uP	SC	
Canivet's Emerald	Chlorostilbon canivetii	fP	SA,SC	NMA
White-bellied Emerald	Amazilia candida	cP	BFM,BFL	MA
Rufous-tailed Hummingbird	Amazilia tzacatl	vP	SC,SA	
Black-headed Trogon	Trogon melanocephalus	cP	BFL,BFM,PW	MA
Violaceous Trogon	Trogon violaceus	cP	BFM,BFL	
Collared Trogon	Trogon collaris	cP	BFM,BFL	
Slaty-tailed Trogon	Trogon massena	cP	BFM,BFL	
Tody Motmot	Hylomanes momotula	fP	BFM,BFL	
Blue-crowned Motmot	Momotus momota	cP	BFM,BFL	
Keel-billed Motmot	Electron carinatum	uP	BFM,BFL	MA
Amazon Kingfisher	Chloroceryle amazona	uP	LA	
Green Kingfisher	Chloroceryle americana	cP	LA	
White-whiskered Puffbird	Malacoptila panamensis	uP	BFM,BFL	
Bird Species Survey, Lenny Gentle (2005)				
Status (Lenny Gentle)		Habitat Preferences within the Vaca Project Area		
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u = uncommon	T = transient (migrant)	PFL	Lowland pine forest	
r = rare	W = winter resident	SC	Scrub, low second growth	
o = occasional	X = one or two records only	SA	Savanna	
l = local		WL	Wetland habitats with emergent vegetation	
Regional Endemics		LA	Lagoons, ponds, rivers, streams	
Legend (L. Jones)		O	Overhead/aerial	
MA Middle America Endemic				
NMA Northern Middle America Endemic				

Birds of the Vaca Area, 2005 / 3				
Species		Status	Habitats	Endemism
Rufous-tailed Jacamar	Galbula ruficauda	cP	BFM,BFL	
Emerald Toucanet	Aulacorhynchus prasinus	fP	BFM	
Collared Aracari	Pteroglossus torquatus	cP	BFM,BFL	
Keel-billed Toucan	Ramphastos sulfuratus	cP	BFM,BFL	
Red-vented Woodpecker	Melanerpes pygmaeus	mP	PFL, MF	
Black-cheeked Woodpecker	Melanerpes pucherani	fP	BFM,BFL	
Golden-fronted Woodpecker	Melanerpes aurifrons	cP	SC	
Smoky-brown Woodpecker	Veniliornis fumigatus	fP	BFM,BFL	
Golden-olive Woodpecker	Piculus rubiginosus	cP	BFM,BFL	
Chestnut-colored Woodpecker	Celeus castaneus	uP	BFM,BFL	MA
Lineated Woodpecker	Dryocopus lineatus	cP	BFM,BFL	
Pale-billed Woodpecker	Campephilus guatemalensis	cP	BFM,BFL	MA
Plain Xenops	Xenops minufus	cP	BFM, BFL	
Rufous-breasted Spinetail	Synallaxis erythrothorax	fP	SC	MA
Scaly-throated Leaf-tosser	Sclerurus guatemalensis	uP	FM,BFL	
Tawny-winged Woodcreeper	Dendrocincla anabatina	uP	BFM,BFL	MA
Ruddy Woodcreeper	Dendrocincla homochroa	uP	BFM,BFL	
Olivaceous Woodcreeper	Sittasomus griseicapillus	uP	BFM,BFL	
Wedge-billed Woodcreeper	Glyphorhynchus spirurus	fP	BFM,BFL	
Barred Woodcreeper	Dendrocolaptes certhia	uP	BFM	
Northern Barred-Woodcreeper	Dendrocolaptes sanctithomae	uP	BFM,BFL,PW	
Ivory-billed Woodcreeper	Xiphorhynchus flavigaster	fP	BFM,BFL	MA
Streak-headed Woodcreeper	Lepidocolaptes souleyetii	uP	BFM,BFL	
Strong-billed Woodcreeper	Xiphocolaptes promeropirhynchus	IP	BFM, BFL	
Great Antshrike	Taraba major	uP	SC	
Barred Antshrike	Thamnophilus doliatus	cP	SC	
Russet Antshrike	Thamnistes anabatinus	IP	BFM	
Dot-winged Antwren	Microrhopias quixensis	cP	BFL	
Dusky Antbird	Cercomacra tyrannina	cP	SC	
Black-faced Antthrush	Formicarius analis	fP	BFM,BFL	
Yellow-bellied Tyrannulet	Ornithion semiflavum	cP	BFM,BFL	MA
Greenish Elaenia	Myiopagis viridicata	fP	BFM,BFL	
Bird Species Survey, Lenny Gentle (2005)				
Status (Lenny Gentle)		Habitat Preferences within the Vaca Project Area		
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o = occasional	X = one or two records only	SA	Savanna	
l = local		WL	Wetland habitats with emergent vegetation	
Regional Endemics		LA	Lagoons, ponds, rivers, streams	
Legend (L. Jones)		O	Overhead/aerial	
MA Middle America Endemic				
NMA Northern Middle America Endemic				

Birds of the Vaca Area, 2005 / 4				
Species		Status	Habitats	Endemism
Ochre-bellied Flycatcher	Mionectes oleagineus	cP	BFM,BFL	
Sepia-capped Flycatcher	Leptopogon amaurocephalus	cP	BFM,BFL	
Northern Bentbill	Oncostoma cinereigulare	cP	BFM,BFL	MA
Slate-headed Tody-Flycatcher	Poecilotriccus sylvia	uP	SC	
Eye-ringed Flatbill	Rhynchocyclus brevirostris	uP	BFM,BFL	MA
Yellow-olive Flycatcher	Tolmomyias suphurescens	cP	BFM,BFL	
Stub-tailed Spadebill	Platyrinchus canrominus	fP	BFM,BFL	MA
Bright-rumped Attila	Attila spadiceus	cP	BFM,BFL	
Brown-crested Flycatcher	Myiarchus tyrannulus	cS	BFL,PW	
Boat-billed Flycatcher	Megarynchus pitangua	cP	BFM,BFL	
Social Flycatcher	Myiozetetes similis	vP	SC	
Tropical Kingbird	Tyrannus melancholicus	vP	PW,SA	
Couch's Kingbird	Tyrannus couchii	cP	PW,SA	
Thrush-like Schiffornis	Schiffornis turdinus	fP	BFM,BFL	
Masked Tityra	Tityra semifasciata	cP	BFM,BFL	
Rose-throated Becard	Pachyramphus aglaiae	fP	BFL	
White-winged Becard	Pachyramphus polychopterus	IP	SC	
Cinnamon Becard	Pachyramphus cinnamomeus	fP	BFM	
White-collared Manakin	Manacus candei	cP	BFL	MA
Red-capped Manakin	Pipra mentalis	cP	BFM,BFL	
Thrush-like Manakin	Schiffornis turdinus	uP	BFL	
Yellow-green Vireo	Vireo flavoviridis	cS	BFM,BFL	
Tawny-crowned Greenlet	Hylophilus ochraceiceps	cP	BFM,BFL	
Lesser Greenlet	Hylophilus decurtatus	vP	BFM,BFL	
Rufous-browed Peppershrike	Cyclarhis gujaensis	mP	BFM	
Green Shrike-Vireo	Vireolanius pulchellus	cP	BFM,BFL	MA
Brown Jay	Cyanocorax morio	cP	BFL,PW	MA
Green Jay	Cyanocorax ynas	cP	BFL, PFM	
Band-backed Wren	Campylorhynchus zonatus	fP	BFM,BFL	
Spot-breasted Wren	Thryothorus maculipectus	vP	BFM,BFL	MA
White-bellied Wren	Uropsila leucogaster	cP	BFM, BFL	
White-breasted Wood-Wren	Henicorhina leucosticta	cP	BFM,BFL	
Bird Species Survey, Lenny Gentle (2005)				
Status (Lenny Gentle)		Habitat Preferences within the Vaca Project Area		
Legend		Legend (Adapted from Jones and Vallely, 2001)		
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r = rare	W = winter resident	SC	Scrub, low second growth	
o = occasional	X = one or two records only	SA	Savanna	
l = local		WL	Wetland habitats with emergent vegetation	
Regional Endemics		LA	Lagoons, ponds, rivers, streams	
Legend (L. Jones)		O	Overhead/aerial	
MA Middle America Endemic				
NMA Northern Middle America Endemic				

Birds of the Vaca Area, 2005 / 5				
Species		Status	Habitats	Endemism
Nightingale Wren	<i>Microcerculus philomela</i>	IP	BFM, BFL	
Long-billed Gnatwren	<i>Ramphocaenus melanurus</i>	cP	BFM,BFL	
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>	cP	PW	
Tropical Gnatcatcher	<i>Polioptila plumbea</i>	fP	BFM,BFL	
Wood Thrush	<i>Hylocichla mustelina</i>	cW	BFM,BFL	
Clay-colored Robin	<i>Turdus grayi</i>	cP	BFL,SC	
White-throated Robin	<i>Turdus assimilis</i>	cP	BFM	
Gray Catbird	<i>Dumetella carolinensis</i>	cW	BFM,BFL	
Tropical Mockingbird	<i>Mimus gilvus</i>	cP	AG	
Blue-winged Warbler	<i>Vermivora pinus</i>	fW	BFM,BFL,SC	
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	uW	BFM,BFL,SC	
Magnolia Warbler	<i>Dendroica magnolia</i>	cW	BFM,BFL,SC	
Black-throated Green Warbler	<i>Dendroica virens</i>	cW	PW,SC	
Black-and-white Warbler	<i>Mniotilta varia</i>	cW	BFM,BFL	
American Redstart	<i>Setophaga ruticilla</i>	cW	BFM,BFL	
Prothonotary Warbler	<i>Protonotaria citrea</i>	cT	BFL,LA	
Worm-eating Warbler	<i>Helmitheros vermivorus</i>	fW	BFM,BFL	
Ovenbird	<i>Seiurus aurocapillus</i>	cW	BFM,BFL	
Northern Waterthrush	<i>Seiurus noveboracensis</i>	cW	LA	
Louisiana Waterthrush	<i>Seiurus motacilla</i>	uW	LA	
Kentucky Warbler	<i>Oporornis formosus</i>	cW	BFM,BFL	
Common Yellowthroat	<i>Geothlypis trichas</i>	cW	SC	
Hooded Warbler	<i>Wilsonia citrina</i>	cW	BFM,BFL	
Wilson's Warbler	<i>Wilsonia pusilla</i>	fW	BFM,BFL	
Golden-crowned Warbler	<i>Basileuterus culicivorus</i>	cP	BFM,BFL	
Yellow-breasted Chat	<i>Icteria virens</i>	fW	SC	
Black-throated Shrike-Tanager	<i>Lanio aurantius</i>	fP	BFM,BFL	NMA
Red-crowned Ant-Tanager	<i>Habia rubica</i>	fP	BFM,BFL	
Red-throated Ant-Tanager	<i>Habia fuscicauda</i>	vP	BFM,BFL	
Scarlet Tanager	<i>Piranga olivacea</i>	uT	BFM, BFL	
Summer Tanager	<i>Piranga rubra</i>	cW	BFM,BFL	
White-winged Tanager	<i>Piranga leucoptera</i>	fP	BFM	
Bird Species Survey, Lenny Gentle (2005)				
Status (Lenny Gentle)		Habitat Preferences within the Vaca Project Area		
Legend		Legend (Adapted from Jones and Vallely, 2001)		
v = very common	P = permanent resident	BFM	Submontane broadleaf forest	
c = common	S = seasonal resident	BFL	Lowland broadleaf forest	
f = fairly common	V = visitor	PFM	Submontane pine forest	
u = uncommon	T = transient (migrant)	PFL	Lowland pine forest	
r = rare	W = winter resident	SC	Scrub, low second growth	
o = occasional	X = one or two records only	SA	Savanna	
l = local		WL	Wetland habitats with emergent vegetation	
Regional Endemics		LA	Lagoons, ponds, rivers, streams	
Legend (L. Jones)		O	Overhead/aerial	
MA Middle America Endemic				
NMA Northern Middle America Endemic				

Birds of the Vaca Area, 2005 / 6				
Species		Status	Habitats	Endemism
Rose-throated Tanager	<i>Piranga roseogularis</i>	rP	BFL	
Yellow-winged Tanager	<i>Thraupis abbas</i>	cP	BFM, BFL	
Crimson-collared Tanager	<i>Ramphocelus sanguinolentus</i>	fP	SC	MA
Yellow-throated Euphonia	<i>Euphonia hirundinacea</i>	cP	BFM,BFL	MA
Olive-backed Euphonia	<i>Euphonia gouldi</i>	cP	BFM,BFL	MA
Golden-hooded Tanager	<i>Tangara larvata</i>	uW	BFL,PW	
Red-legged Honeycreeper	<i>Cyanerpes cyaneus</i>	cP	BFM,BFL	
Orange-billed Sparrow	<i>Arremon aurantiirostris</i>	cP	BFM,BFL	
Green-backed Sparrow	<i>Arremonops chloronotus</i>	cP	BFL,SC	NMA
Buff-throated Saltator	<i>Saltator maximus</i>	fP	BFL	
Grayish Saltator	<i>Saltator coerulescens</i>	cP	SC	
Black-headed Saltator	<i>Saltator atriceps</i>	cP	BFL	MA
Black-faced Grosbeak	<i>Caryothraustes polioaster</i>	cP	BFM,BFL	MA
Blue-black Grosbeak	<i>Cyanocompsa cyanoides</i>	cP	BFM,BFL	
Indigo Bunting	<i>Passerina cyanea</i>	cW	SC	
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	mP	WL	
Melodious Blackbird	<i>Dives dives</i>	vP	SC	MA
Great-tailed Grackle	<i>Quiscalus mexicanus</i>	vP	WL	
Black-cowled Oriole	<i>Icterus prothemelas</i>	cP	BFL,PW,SA	MA
Yellow-tailed Oriole	<i>Icterus mesomelas</i>	cP	SC,LA	
Yellow-backed Oriole	<i>Icterus chrysater</i>	cP	PFM	
Yellow-billed Cacique	<i>Amblycercus holosericeus</i>	cP	BFL,PW	
Montezuma Oropendola	<i>Psarocolius montezuma</i>	vP	BFL	MA
Bird Species Survey, Lenny Gentle (2005)				
Status (Lenny Gentle)		Habitat Preferences within the Vaca Project Area		
Legend		Legend (Adapted from Jones and Vallely, 2001)		
v = very common	P = permanent resident	BFM	Submontane broadleaf forest	
c = common	S = seasonal resident	BFL	Lowland broadleaf forest	
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r = rare	W = winter resident	SC	Scrub, low second growth	
o = occasional	X = one or two records only	SA	Savanna	
l = local		WL	Wetland habitats with emergent vegetation	
Regional Endemics		LA	Lagoons, ponds, rivers, streams	
Legend (L. Jones)		O	Overhead/aerial	
MA	Middle America Endemic			
NMA	Northern Middle America Endemic			
* The "Least" Pygmy-Owl in Belize became Central American Pygmy-Owl when they split this form off from others in the group. The species name changed from <i>minutissimum</i> to <i>griseiceps</i> .(L. Jones, pers. com.)				

Appendix V Table 5: Mammals of the Vaca Project Area, 2005

Mammals of Vaca Project Area				
Common Name	Scientific Name	Status		
		IUCN	CITES	Belize Status
Didelphimorphia				
Didelphidae				
Virginia Opossum	<i>Didelphis virginiana</i>			
Grey Four-eyed Opossum	<i>Philander opossum</i>			x
Edentata				
Dasypodidae				
Nine-banded Armadillo	<i>Dasypus novemcinctus</i>			x
Primates				
Cebidae				
Yucatan Black Howler	<i>Alouatta pigra</i>	E	I	x
Rodentia				
Sciuridae				
Yucatan Squirrel	<i>Sciurus yucatanensis</i>			
Deppe's Squirrel	<i>Sciurus deppei</i>			x
Goemyidae				
Hispid Pocket Gopher	<i>Orthogeomys hispidus</i>			
Muridae				
Big-eared Climbing Rat	<i>Otodylomys phyllotis</i>			
Erethizontidae				
Mexican Porcupine	<i>Coendou mexicanus</i>			x
Dasyproctidae				
Central American Agouti	<i>Dasyprocta punctata</i>			x
Agoutidae				
Paca	<i>Agouti paca</i>			x
Carnivora				
Canidae				
Grey Fox	<i>Urocyon cinereoargenteus</i>			
Procyonidae				
White-nosed Coati	<i>Nasua narica</i>			
Kinkajou	<i>Potos flavus</i>			
Mustelidae				
Neotropical River Otter	<i>Lutra longicaudis</i>	DD	I	x
Felidae				
Puma	<i>Puma concolor</i>	Lr/Nt	II	x
Jaguar	<i>Panthera onca</i>	Lr/Nt	I	x

Status: IUCN listing: Lr/Nt (Lower risk, Near threatened), V (Vulnerable), E (Endangered), DD (Data deficient). IUCN Red List of threatened species (2004) CITES Listed: Appendix I; Appendix II Belize Species of Concern (Rare or Hunted throughout range): NARMAP (1995), citing Emmons, 1990				
Common Name	Scientific Name	Status		
		IUCN	CITES	Belize Status
Perissodactyla				
Tapiridae				
Baird's tapir	<i>Tapirus bairdii</i>	E	I	x
Artiodactyla				
Tayassuidae				
Collard Peccary	<i>Tayassu tajacu</i>		II	x
White-lipped Peccary	<i>Dicotyles pecari</i>		II	x
Artiodactyla (cont.)				
Cervidae				
White-tailed Deer	<i>Odocoileus virginianus</i>			x
Red brocket Deer	<i>Mazama americana</i>	DD		x
Status: 1. Species of Concern (Rare or Hunted throughout range): NARMAP (1995), citing Emmons, 1990 2. IUCN listing: Lr/Nt (Lower risk, Near threatened), V (Vulnerable), E (Endangered), DD (Data deficient). IUCN Red List of threatened species (2004) 3. CITES Listed				