

Field investigations were held throughout Humboldt, Shasta, Tehama, and Trinity counties during the periods December 5-11, 1972, and December 28, 1972-January 4, 1973, to establish an estimate of local mountain lion populations and distributions within these areas.

Interviews were conducted with mountain lion hunters, houndsmen, Department Management and Protection personnel, cooperating governmental resource agencies, ranchers and others with knowledge of local mountain lion density and distribution. Field verification of location and number data was attempted by investigation of randomly selected areas of alleged lion density. Information was also gathered on pro or anti lion "popular opinion," population trends, hunting pressure, prey-predator relationships, and contacts in other areas. Interviews were conducted during the day and evening depending upon the availability of those contacted.

Mountain lions in Humboldt, Shasta, Tehama, and Trinity counties have historically and recently received moderate to heavy hunting pressure. The areas of heaviest hunter pressure correspond to those portions of the county over approximately 2,000 feet with access roads. Most of the county lands fall within this definition. Hunters for lion during the bounty period were extremely successful in this section of the state. Humboldt County yielded 1,144 lions to the state bounty system from 1907 to 1963, 9.2 percent of the state's total kill of 12,461. Shasta County yielded 806 cats (6.5 percent); Tehama County, 468 (3.8 percent); and Trinity County, 1,026 (8.2 percent). The total lion kill for these four northern California counties is 3,444 cats or 27.6 percent of the bountied animals. These counties have received at least moderate hunter pressure during the recent years. During the 1970-71 lion season Humboldt County contributed 4 lions (4.8 percent) to the state bag of 83 lions while Shasta, Tehama, and Trinity contributed 5 (6 percent), 0 (0 percent), and 6 (7.2 percent) respectively. The 1970-71 four county kill total of 15 lions made up 18.1 percent of the state bag. During the 1971-72 lion hunting season Humboldt County contributed 0 (0 percent) lions to the statewide total kill of 35 lions, with Shasta, Tehama, and Trinity County yielding 1 (2.9 percent), 1 (2.9 percent), and 0 (0 percent) respectively. A total four county kill of 3 lions was 8.6 percent of the state bag. Mountain lion pursuit activity is currently being conducted illegally in this four county area. A large number of the hound hunters contacted still actively pursue lions illegally. Even though cognizant of the Legislative moratorium against lion hunting, these northern California hunters are reluctant to give up an activity which most of them have always participated in; and most feel that Department patrol activities are insufficient to represent an effective control. Lion hunters from this section of the state are the most actively interested mass of houndsmen interested in the resumption of a mountain lion season that has thus far been encountered within the study.

Those familiar with lions in the areas investigated feel that bounty pressure kept the cat density somewhat depressed during its tenure, but that lion numbers have responded to the decrease in hunting pressure and doubled in the last 10 years. In nearly every section of the four counties investigated, those interviewed stated that track and sign was as abundant as they had ever seen it. To be certain, the north state lion habitat is more verticle and timbered, discouraging most forms of human encroachment except those more likely to extend (lumber companies) the cat habitat's carrying capacity by creating better prey habitat.

The livestock interests active within the area investigated reflect the change in thinking this industry has assumed statewide. Ranchers interviewed expressed the wish to maintain corrective control on specific livestock predators, but within the species realm they did not desire control. Most ranchers were pleased to know of the presence of lions on their property as long as there was only a limited predation problem. The general public questioned on their feelings for or against mountain lion hunting was, as a whole, apathetic. Few had given the question any prior thought, and when questioned on their immediate feeling, did not care much one way or the other. Much of the Indian population in the eastern Humboldt County and Western Trinity County area expressed dissatisfaction with hound hunting especially in connection with bear; however this objection was in regard to religious tenets and not in regard to the act of lion hunting.

*and hounds
baited*

The illegal taking of mountain lion seems to be quite high for the areas investigated. Although the information is not strong enough to build a court case, Bob Mapes, Fish and Game Unit Manager in Eureka, has accumulated data that indicates the illegal death of five lions within the Humboldt-Trinity County area. From conversation with those actively involved in illegal pursuit of lion or other hound-associated activities, it is felt that at least 10-15 animals have been unlawfully dispatched within Humboldt, Shasta, Tehama, and Trinity counties since the moratorium went into effect. Another factor to be considered on allowing mountain lion pursuit is the practice necessary to effectively train any hound dog to pursue. The hound dogs must periodically be allowed to maul (chew) the pursued animal be it bear, bobcat, or lion. The dog will not continue to effectively hunt for a desired prey if it is denied the satisfaction of capture. It is inconceivable that lion hunters limited to "pursuit only" regulations will practice the law, as they could not maintain their method of capture (dogs) within its structure.

Eighty-seven interview attempts were conducted during this four county investigation. Data was taken for 67 fifteen minute quadrangles and 5 seven and one-half minute quadrangles within the study area. Quad populations went from a numerical high of 10 lions in the Ironside Mountain quadrangle to a low of 0 in 14 quadrangles containing transient habitat. Quad density varied from a high of one lion/21 square miles of lion habitat in the Weott quadrangle (Van Duzen River country) to a low of one lion/75 square miles of lion habitat in the Panther Springs quadrangle (Mill Creek, Tehama County country). The total square miles of lion habitat from the 92 quads investigated were 10,513, giving a total average lion density of one lion per 34 square miles.

Field verification was attempted at numerous locations throughout the four county area investigated. However, weather conditions, soil type, and migration activities were negative factors operating against sign recognition. No definite lion sign was observed in the $3\frac{1}{2}$ days of field work devoted to this function.

The major prey species associated with mountain lion in the study area was deer. Incidental prey species include those noted in other areas of the state including livestock (horse, sheep, cattle, pigs, chickens, and burro), pets (housecats and dogs, porcupine, quail, squirrels, and occasionally (in the male lion's case) their own kittens.

SHASTA - TEHAMA COUNTIES

	<u>Quadrangle</u>	<u>Geographic Location</u>	<u>Area of Investigation Square Miles</u>	<u>Est. Lions</u>	<u>Est. M²/Lion</u>
15'					
1	Dunsmuir	Sacramento River	150	5	30
2	Shoeinhorse Mountain	McCloud River	150	5	30
3	Big Bend	Pit River	150	6	25
4	Pondosa	Fall River	150	3	50
	Fall River Mills	Fall River	100	2	50
	Schell Mountain	Trinity River	120	4	30
5	LaMoine	Sacramento River	150	6	25
6	Bollibokka Mountain	Pit River	180	6	30
7	Montgomery Creek	Pit River	220	7	31
8	Burney	Burney Creek	225	7	32
	Jellico	Hat Creek	170	5	34
	French Gulch	French Gulch	220	7	31
9	Redding	Redding	70*	0	0
10	Millville	Millville	100	2	50
11	Whitmore	Clover Mountain	190	3	63
EIK	STUDY AREA - Manzanita Lake	Viola	(1735) 155	(50) 3	(35) 52
	Prospect Peak	Lassen Volcano Nat. Park	55	1	55
	Chanchelulla Peak	Chanchelulla Peak	180	6	30
	Ono	Ono	200	6	33
	Anderson	Sacramento River	70*	0	0
	Tuscan Buttes	Balls Ferry	100*	0	0
	Manton	Paynes Creek	200	4	50
	Lassen Peak	Lassen Volcano Nat. Park	50	1	50
	Yolla Bolly	Yolla Bolly Mountain	229	9	25
	Colyear Springs	Cottonwood Creek	200	8	25

*Transient use.

SHASTA - TEHAMA COUNTIES (cont.)

15'	<u>Quadrangle</u>	<u>Geographic Location</u>	<u>Area of Investigation Square Miles</u>	<u>Est. Lions</u>	<u>Est. M²/Lion</u>
	Red Bank	Elder Creek	120	3	40
	Red Bluff	Sacramento River	70*	0	0
	Panther Springs	Mill Creek	150	2	75
	Butte Meadows	Deer Creek	140	2	70
	Anthony Peak	Thomas Creek	130	5	26
	Paskenta	Thomas Creek	140	3	40
	Flournoy	Thomas Creek	120*	0	0
	Corning	Corning	40*	0	0
	Richardson Springs	Deer Creek	<u>100*</u>	<u>0</u>	<u>0</u>
		Totals	4,794	121	40

*Transient use.

HUMBOLDT - TRINITY COUNTIES

15'	<u>Quadrangle</u>	<u>Geographic Location</u>	<u>Area of Investigation Square Miles</u>	<u>Est. Lions</u>	<u>Est. M²/Lion</u>
	Tectah Creek	NW Humboldt County	200	4	50
	Orleans	NE Humboldt County	100	3	33
	Coyote Peak	Redwood Creek	200	5	40
	Hoopa	Hoopa Indian Reservation	229	8	29
	Salmon Mountain	Salmon Mountains	60	2	30
	Cecilville	Trinity Alps	50	2	25
	Coffee Creek	Trinity Alps	150	6	25
	Bonanza King	Trinity Mountains	220	8	28
	Eureka	Eureka	80*	0	0
	Blue Lake	Redwood Creek	170	5	34
	Willow Creek	Willow Creek	200	9	22
	Ironside Mountain	New River	220	10	22
	Helena	Trinity Alps	200	8	25
	Trinity Dam	Trinity Dam	180	7	26
	Schell Mountain	Trinity Mountains	80	3	27
	Ferndale	Ferndale	50	0	0
	Fortuna	Fortuna	160	3	53
	Iaqua Buttes	Yager	200	5	40
	Pilot Creek	S. Fork Trinity River	220	8	28
	Hyampom	S. Fork Trinity River	220	9	24
	Hayfork	Hayfork	200	8	25
	Weaverville	Weaverville	190	7	27
	Cape Mendocino	Petrolia	100	2	50
	Scotia	Scotia	170	4	42
	Weott	Van Duzen River	190	8	21

*Transient use

HUMBOLDT - TRINITY COUNTIES (cont.)

	<u>Quadrangle</u>	<u>Geographic Location</u>	<u>Area of Investigation Square Miles</u>	<u>Est. Lions</u>	<u>Est. M²/Lion</u>
15'	Blacksburg	Van Duzen River	200	8	25
	Pickell Peak	So. Fork Trinity River	210	7	30
	Dubakella Mountain	So. Fork Trinity River	200	8	25
	Point Delgada	SW Humboldt County	110	3	37
	Garberville	Garberville	190	4	42
	Alderpoint	Eel River	200	6	33
	Kettenpom	Zenia	220	7	31
	Black Rock Mountain	Shell Mountain	220	8	28
7½'	Orick	NW Humboldt County	30*	0	0
	Trinidad	Trinidad Head	20*	0	0
	Rodgers Peak	Stone Lagoon	30*	0	0
	Crannell	Crannell	30*	0	0
	Fern Canyon	NW Humboldt County	20*	0	0
		Totals	5,719	185	31
	Total for Humboldt, Shasta, Tehama, and Trinity		<u>10,513</u>	<u>306</u>	<u>34</u>

*Transient use

Attempted Contacts

Shasta and Tehama Counties

Ken Zanzi	Fish and Game	Paynes Creek
Leo Pyshora	Fish and Game	Redding
David Smith	Fish and Game	Redding
Tom E. Ramsey	Fish and Game	Red Bluff
James R. Hampe	Fish and Game Warden	Fall River Mills
Floyd Dowell	Fish and Game Warden	Bieber
Captain Wayne Klein	Fish and Game Warden	Redding
Emil Becas	Fish and Game Warden	Red Bluff
Ernest Farmer	Fish and Game Warden	Whitmore
Russ Murphy	Fish and Game Warden	Redding
Rudolph Mortizia	Fish and Game Warden	Project City
Henry Null	Fish and Game Warden	Cottonwood
Warren Duke	Fish and Game Warden	Corning
Dean Connard	Lion Hunter	Flournoy
William M. Lewis	Houndsman, Ponderosa Sky Ranch	Paynes Creek
J. M. Mitchell	Lion Hunter	Burney
Cleo E. Payton	Houndsman	Junction City
John James Polley	Lion Hunter	Anderson
Charles F. Weston	Lion Hunter	Flournoy
Elvin L. Davis	Lion Hunter	Redding
Ivan L. Marx	Lion Hunter	Burney
Addley R. Tole	Lion Hunter	Redding
Frank Weiss	Lion Hunter	Burney
John Mitchell	Lion Hunter	Burney
Pete Smith	Lion Hunter	Redding

Attempted Contacts

Shasta and Tehama Counties (cont.)

Ray Wisenhunt	Lion Hunter	Redding
Jerry Spurlock	Lion Hunter	Willows
Kenny Wells	Lion Hunter	Burney
Lorinda Hulsman	Ranchwoman	Paynes Creek

Attempted Contacts

Humboldt and Trinity Counties

Bill Peters	County Parks	Eureka
Oliver Nichols	Houndsman	Mad River
Andrew Silva	Houndsman	Weaverville
Earl Davis	Houndsman	Arcata
James McKnight	Houndsman	Weaverville
Charlie Stone	Houndsman	Central Valley
Marvin Teeter	Houndsman	Hayfork
A. M. Weathers	Houndsman	Willow Creek
John Hodges	Houndsman	Montgomery Creek
Ben Simer	Houndsman	Blue Lake
L. J. (Tex) Jonas	Houndsman	Arcata
Henry McFerrry	Houndsman	Blue Lake
George Davis & John	Houndsmen	Blue Lake
Sherman Chisolm	Houndsman	McKinleyville
Harold Wilson	Houndsman	Blue Lake
Jerry Rice	Houndsman	Etna
Allen Rice	Houndsman	Etna
Jerry Westbrook	Houndsman	Burnt Ranch
John Holden	Houndsman	Hoopa
Karyn Abshire		Redwood Valley
David O. Smith	Fish and Game Unit Manager	Redding
Bob Mapes	Fish and Game	Eureka
Tim Burton	Fish and Game Unit Manager	Lewiston
Henry Marak	Fish and Game Warden	Willow Creek
Robert Ekwall	Fish and Game Warden	Trinity Center
Darrell Yount	Fish and Game Warden	Hayfork

Attempted Contacts

Humboldt and Trinity Counties (cont.)

Curtis Proffitt	Fish and Game Warden	Weaverville
Louis P. Barnes	Fish and Game Warden	Redway
Wallace J. Callan	Fish and Game Warden	Fortuna
Michael J. Gillum	Fish and Game Warden	Orleans
Harold Wilson	Trapper	Blue Lake
John Finnegan	Fish and Game Warden	Arcata
Mike McCollum	Houndsman	Eureka
Joe Russ	Fish and Game Commissioner	Ocean House
Dave Garber	U. S. Forest Service Biologist	Eureka
Mr. Edder		Coastal California
Vernon Brightman	Houndsman, lion man	Blocksburg
Lloyd Powell	Trapper	Tehama County
Andy Burgess	Judge	Zenia
Mr. Crenshaw	Houndsman	Alder Point
Mel, Don & Leo Brown	Houndsmen	Van Duzen Road
Francis Keeler	Houndsman <i>Former State Lion Hunter</i>	Willow Creek
Bud Jackson	Houndsman	Hayfork
Dr. Archie Mossman	University of Eureka	Eureka
Dave Brady	Sporting Goods Store Owner	Weaverville
Tim Brady	Sporting Goods Store Owner	Weaverville
Tom Weaver	Long-time Resident	Hawkins Bar
Larry Rilley	Bear Hunter	Trinity Center
Don Foster	Trapper	Redding
Dave Ruiz	Houndsman	Junction City
Mr. Payton	Houndsman	Helena
Jim Briggman	Ranger, Forest Service	Willow Creek

Attempted Contacts

Humboldt and Trinity Counties (cont.)

Mr. Glaze	U. S. Forest Service	Orleans
Leo Mullins	Brush picker and houndsman	Orleans
Ewell Fountain	Rancher	Salyer
Mr. Harrison	County Roads Department	Hayfork