



Tracking Number: (2021-027)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to FGC@fgc.ca.gov. Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or FGC@fgc.ca.gov.

SECTION I: Required Information.

Please be succinct. Responses for Section I should not exceed five pages

1. Person or organization requesting the change (Required)

Name of primary contact person: Sabrina Ashjian, California State Director, The Humane Society of the United States

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Telephone number: 916-662-2019

Email address: sashjian@humanesociety.org

2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested:

Cal. Fish & Game Code §§ 200, 203, 203.1, 302.

3. Overview (Required) - Summarize the proposed changes to regulations:

We request that the California Fish and Game Commission ("Commission") amend existing black bear (*Ursus americanus*) hunting regulations to eliminate open hunting season until (1) an empirical study is conducted of the state's black bear populations, (2) the effects of drought and recent wildfires on the state's bear populations are adequately studied, and (3) the state's bear management plan is updated to include the best available science, including social science.

4. Rationale (Required) - Describe the problem and the reason for the proposed change:

As detailed more fully in the letter included as Attachment A, we are gravely concerned about the status of California's black bear population given the numerous threats these bears face and recent data released by the Department of Fish and Wildlife ("DFW") indicating a steep decline in the state's bear population. We therefore request that the Commission take urgent regulatory action to protect black bears.



Black bears in California are threatened by numerous factors. To start, California has experienced record-level fires and drought in recent years. In 2021 alone, more than three million acres burned from intense wildfires. Yet, to date, DFW has not analyzed the effects these fires—and future fires— or California’s well-documented drought will have on the state’s black bears, their food sources, or their habitats. Climate change exacerbates these issues and poses a further threat to bears both because erratic weather events limit the availability of natural foods and because warmer weather causes bears to spend less time in their dens, increasing the potential for human-wildlife conflict. As a result, bear biologists warn we must do more to avoid attracting bears to human food sources by implementing bear-aware campaigns, but we should certainly not increase bear mortalities to reduce conflicts. Killing bears to reduce conflict risks extirpating local populations *and* multiple studies warn that hunting bears does nothing to reduce conflicts with them.

Human persecution of bears, such as through hunting and predator control, not only does not stop human-bear conflict, it also threatens these animals because it causes “super-additive” mortality, meaning that kill rates exceed mortalities that would occur naturally. This is because hunters typically target adult breeding animals, which disrupts animals’ social structure and leads to indirect effects, particularly increased infanticide resulting in decreased recruitment of young. Because bears are slow to reproduce, compared to other mammals, this super-additive mortality can be especially devastating to bear populations. Another form of human persecution, poaching, is of major concern in California; the current bear management plan suggests that poaching numbers equal that of legal killings in some areas of the state.

In the face of these threats to bears, we are alarmed by worrisome indications of a steep decline in California’s black bear population. In late October 2021, DFW posted its black bear “take” reports for the years 2017, 2018, 2019 and 2020. In the 2020 report, the agency suggests that the black bear population is 15,934 ($\pm 6,163$), a marked decrease from the estimated population of 30,000-40,000 that DFW has suggested for years. DFW now believes that the California bear population could be as low as 9,771 individuals, which would indicate a 67% decline in the number of bears from the previously reported lowest population range of 30,000 bears.

Equally troublesome is DFW’s unempirical approach to estimating the state’s bear population. Although many large-carnivore biologists recognize that using kill levels to estimate bear populations is unreliable, DFW uses the number of hunted bears to approximate the live bear population in the state. In other words, DFW has no empirically based estimate of the state’s bear population. What we do know is that the numbers of black bears killed annually is in decline while the number of bear hunters themselves has increased with a record 30,388 in 2020, providing further indication that the state’s bear population is declining.

Under California’s Constitution and the Fish and Game Code, the Commission has a clear obligation to provide for the conservation of the state’s wildlife. California’s Constitution creates the Commission and gives the California legislature the authority to “delegate to the commission such powers relating to the *protection and propagation of fish and game*” as the legislature sees fit. Cal. Const. art. IV, § 20 (emphasis added). The legislature has accordingly granted the Commission “the power to regulate the taking or possession of . . . mammals.” Cal. Fish & Game Code § 200. More specifically, the Commission has regulatory authority to “establish, extend, shorten, or abolish open seasons and closed seasons” for game mammals,



such as black bears. *Id.* § 203. The legislature has provided specific factors that the Commission must consider when adopting such regulations, including “populations, habitat, food supplies, the welfare of individual animals, and other pertinent facts and testimony.” *Id.* § 203.1.

Further, the Commission has specific obligations with respect to its regulation of the black bear hunting season. The Commission must “annually determine whether to continue, repeal, or amend regulations establishing hunting seasons for black bears.” *Id.* § 302. This determination “shall include a review of factors which impact the health and viability of the black bear population.” *Id.*

Given the threats California black bears face and the indications of their population decline—factors that the Commission is *required* to consider in making its annual determination of whether to continue the black bear hunting season—we ask the Commission to eliminate the season until (1) an empirical study is conducted of the state’s black bear populations, (2) the effects of drought and recent wildfires on the state’s bear populations are adequately studied, and (3) the state’s bear management plan is updated to include the best available science, including social science. More specifically, the updated bear management plan should also consider the additional effects from climate change, including stochastic weather events (late freezes affecting mast crops), insect-borne diseases and parasites, sexually selected infanticide resulting from human persecution, and it should include plans to prevent human-bear conflicts, such as through bear-smart or bear-aware campaigns.

Our request to suspend bear hunting season until these conditions are met is not only consistent with the Commission’s legal obligations, it also honors the will of the people of California—70% of California voters do not want black bears killed for sport.

SECTION II: Optional Information

5. **Date of Petition:** December 10, 2021

6. **Category of Proposed Change**

- Sport Fishing
- Commercial Fishing
- Hunting
- Other, please specify: [Click here to enter text.](#)

7. **The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

- Amend Title 14 Section(s): 365, 366, see Attachment B for proposed revisions
- Add New Title 14 Section(s): [Click here to enter text.](#)
- Repeal Title 14 Section(s): [Click here to enter text.](#)

8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** [Click here to enter text.](#)
Or Not applicable.



9. Effective date: If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency:

We ask that the requested regulatory changes take effect on or before August 1, 2022.

10. Supporting documentation: Identify and attach to the petition any information supporting the proposal including data, reports and other documents:

Please see Attachment A, which is a letter detailing the evidence of a steep population decline in California’s black bear population and the current threats these animals face. The letter includes reference to supporting authorities.

Full-text PDF copies of all studies cited in Attachment A are available here:

https://drive.google.com/drive/folders/1pIGuZv7AFpK_NePEPsoL-SELDYrtrSPd?usp=sharing

We can provide copies of individual studies via email upon request.

11. Economic or Fiscal Impacts: Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:

The Department may see a modest decrease in revenue because it will not receive fees for the issuance of bear license tags while the open season is eliminated.

12. Forms: If applicable, list any forms to be created, amended or repealed:

[Click here to enter text.](#)

SECTION 3: FGC Staff Only

Date received: 12/10/21.

FGC staff action:

- Accept - complete
- Reject - incomplete
- Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: _____

Meeting date for FGC consideration: Receive 12/15-16/21; action 2/16-17-21_

FGC action:

- Denied by FGC
- Denied - same as petition _____
- Granted for consideration of regulation change

Tracking Number

Attachment A
November 22, 2021 Letter to Commission



**THE HUMANE SOCIETY
OF THE UNITED STATES**

November 22, 2021

Peter S. Silva, President
Samantha Murray, Vice President
Jacque Hostler-Carmesin, Member
Eric Sklar, Member
Erika Zavaleta, Member

California Fish and Game Commission

715 P Street, 16th floor, Sacramento, 95814
P.O. Box 944209, Sacramento, CA 94244-2090

Re: Urgent request to review black bear (*Ursus americanus*) hunting in California, draft an updated black bear management plan, and conduct a population study to avoid jeopardizing California's black bears

Dear President Silva and Commissioners:

In light of the historic wildfires over the past several years (including the loss of more than a record three million acres from wildfires in 2021 alone¹), and data recently released by the California Department of Wildlife (DFW), we are deeply concerned about the state of black bears in California.

In late October 2021, DFW posted its black bear “take” reports for the years 2017, 2018, 2019 and 2020. From the 2020 report, we are alarmed to see the agency suggest that the black bear population is 15,934 ($\pm 6,163$) rather than the estimated population of 30,000 – 40,000 that DFW has suggested for years.² DFW now believes that *the California bear population could be as low as 9,771 individuals*, which would indicate a 67% decline in the number of bears from the previously reported lowest population range of 30,000 bears. A nearly 70% decrease in California's black bear population should spur the Commission to take urgent action to protect California's black bears from all harms, including an update to the 1998 black bear management plan.

A. California's climate crisis is acute and harms black bears

In 2021, California experienced record-level fires. According to CalFire, more than three million acres burned,³ and in some areas, even soils experienced severe burn.⁴ Because of erratic weather events from the climate crisis, including late season frosts or droughts, natural foods are increasingly unavailable to bears. For instance, in a Colorado bear study, the female cohort of the population declined by 57% because of human-caused mortalities from vehicle collisions, hunting and predator control, which coincided with widespread unavailability of natural foods. This would not have been detected by wildlife managers without the rigorous population monitoring study in place.⁵ California has no such equivalent in population monitoring as we discuss below.

Climate change has resulted in a warmer climate, which causes bears to spend less time in their dens.⁶ Because of all these factors, black bear biologists warn that wildlife managers must limit recreational black bear killing to reduce total mortality, and especially during years of poor natural food production, which is readily predicted by weather events.⁷



B. Bears are slow to reproduce and thus are susceptible to overkill

Black bear biologists suggest that the total annual human-caused mortality that a black bear population can sustain is only between 4% and 10% of the population; more than that is simply super-additive mortality.⁸ In other words, when there is additive mortality, the population will decline in number, and sometimes that decline is unsustainable because of black bear biology. For example, female bears rarely migrate—they prefer to live near their natal areas, and this compounds the harms to their populations from hunting, chronic wildfires and other sources of mortality that affect their populations.⁹ The loss of females reduces a bear population’s ability to bounce back as they are the key to sustaining the population.¹⁰

Human persecution of bears, such as through hunting and or predator control, causes “super-additive” mortality, meaning that kill rates exceed mortalities that would occur naturally.¹¹ This is because hunters like to target adult breeding animals,¹² which disrupts animals’ social structure and leads to indirect effects, particularly increased infanticide resulting in decreased recruitment of young.¹³

Compared to other mammals, bears are slow to reproduce. Generally, females are not considered to be adults until they are 3 to 6 years old—and in the arid West, that timeframe is generally older at 4 to 5 years—but females are capable of breeding until age 21.¹⁴ Fecundity varies with age.¹⁵ Females generally give birth to litters of cubs only every 2-3 years. Cub survival in one Colorado study was about 55%.¹⁶ Cubs die from many factors including vehicle collisions, predation or starvation.¹⁷ The intervals are dictated by both bear biology and weather and climate. Bears will keep their cubs to 15-24 months (or longer if they are underweight). But if there are droughts or frosts, bears’ foods can be unavailable to them—which both reduces reproduction potential and increases the intervals between litters of cubs and cub survival itself.¹⁸ Thus, bears reproduce slowly,¹⁹ and are highly susceptible to overkill²⁰—including by hunters and predator-control agents.

Large-bodied carnivores such as black bears are sparsely populated across vast areas, invest in few offspring, provide extended parental care to their young and reproduce slowly. Bears are capable of self-regulation²¹ and are regulated by habitat and climatic conditions. Considering these biological factors, they rely on social stability to maintain resiliency.²²

Without social stability, bears experience sexually selected infanticide; that is, when a resident, adult male is removed, subadult males vie for his home range and mates. These newcomers kill the adult male’s offspring in order to spur females back into breeding so the newcomers can pass on their genetic materials.²³ Gosselin et al. (2015) state: “In species with sexually selected infanticide (“SSI”), hunting may decrease juvenile survival by increasing male turnover.” This study and others show that hunting mortality can harm social organization of species, because it promotes male turnover and thus increases sexually selected infanticide upon cubs of deceased males.²⁴

Welfelt et al. (2019) in their study of Washington bears found bear densities range widely by region, and that managers had over-estimated the population of bears in western Washington—including cubs—by 50 percent.²⁵ The implications for California are particularly salient, given that black bear habitat in California is also widely varied by region, and black bears are a forest obligate.²⁶ Density estimates from studies conducted in optimal quality habitats where animals are abundant can only be extrapolated cautiously to larger areas with similar habitats and landscape characteristics.²⁷ DFW has failed to accommodate differences in vegetation, land use and topography to avoid overestimating bears, and particularly females.²⁸



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In sum, around the world and in California, large carnivores face extinction from human factors,²⁹ thus it is incumbent upon the Commission to conserve California's black bears now, so they are not extirpated like grizzly bears had been. Expanded human development into bear habitats during the climate crisis (including wildfires) exacerbates bear mortalities; thus, the Commission should act to curb black bear mortalities and especially by hunting.³⁰

C. DFW's black bear census does not rely upon best available science

Garshelis and Hristienko (2006) caution that many state wildlife managers fail to adequately investigate population sizes and trends, but rather rely on guesswork to estimate bear numbers.³¹ Population trends must be determined using reliable methodologies; however, sightings, depredation events and kill levels are not reliable means to indexing a population.³² In contravention to these principles for enumerating bears, the DFW's 2020 take report provides:

To produce a population estimate for a given year, the Department uses an age-at-harvest model reliant on the age and sex of bears harvested that year. In 2013, the use of hounds in the sport take of bears was prohibited, which violated a key assumption in that model regarding consistent hunter effort. Annual bear harvests have been relatively lower since this ban . . . resulting in correspondingly lower population estimates The average population growth rate in the years following the ban (1.00 in 2013-2020) remains steady and on par with the average population growth rate in years before the ban (1.03 in 1993-2012) The Department estimates approximately 15,934 ($\pm 6,163$; 95% CI) bears inhabited the black bear hunt area prior to the start of the 2020 bear hunting season . . .

In short, DFW admits it uses dead, hunted bears to estimate the number of live bears in California. This is not empirical science, according to many large-carnivore biologists.³³ And ignores the many benefits bears confer on their forest ecosystems³⁴ and their intrinsic worth.³⁵

What we do know is: the numbers of black bears killed annually is in decline while the number of bear hunters themselves were a record 30,388 in 2020. See: Figures 1, 2 and 3. In the absence of empirical population data, the Commission must act to prevent the overkill of California's bear populations.

Also, the average number of bears hunted in California from 1998 to 2012 was 1,777 bears, and for the years 2013 to 2020, the average was 1,258 bears. On average, 519 bears *were not* killed by hunters each year since 2013 – making DFW's model particularly doubtful – because less bears were killed by hunters and yet the population is likely in decline.

What we do know is: the numbers of black bears killed annually is in decline while the number of bear hunters themselves has increased with a record 30,388 in 2020. See: Figures 1, 2 and 3. In the absence of empirical population data, the Commission must act to prevent the overkill and jeopardy of California's bear populations.

DFW's bear population analyses have no basis in sound science because they are not based on traditional population enumeration methods, but rather on a discredited method of using the numbers of dead, hunted bears to guess at the number of live bears. Yet, the agency had claimed between 30,000 to 40,000 bears in California on its website, then in its 2020 Annual Bear Take Report precipitously dropped that population figure



to 15,934 (±6,163) – a population range between 9,771 to 22,097 individuals – even as the numbers of bears killed by hunters has simultaneously declined in California. Figs. 1, 2 and 3.

Figure 1. Black bears hunted in California, 2001-2020

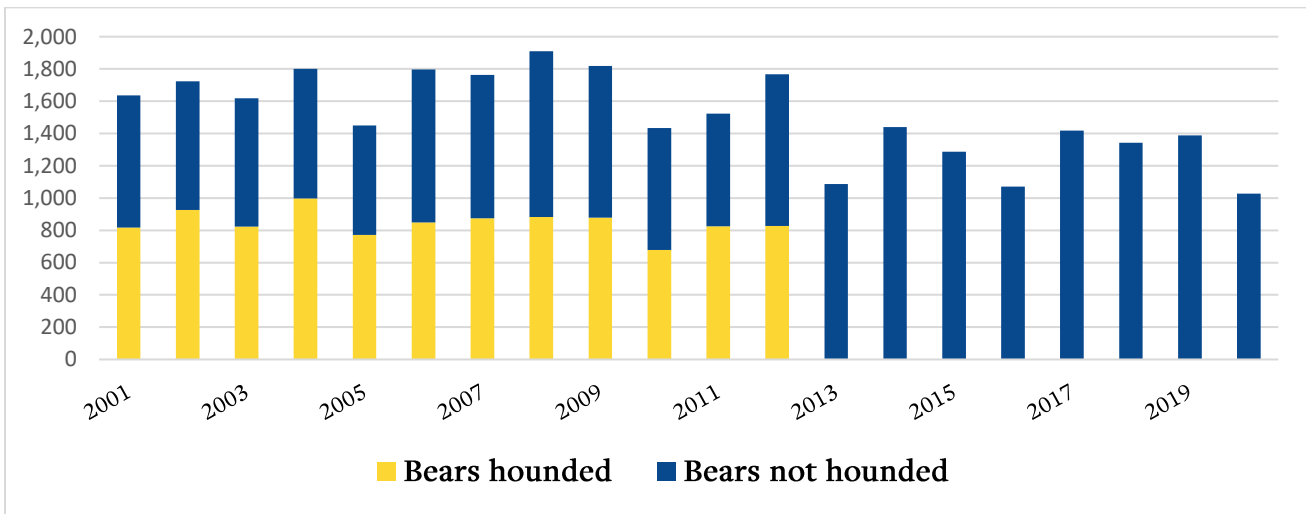
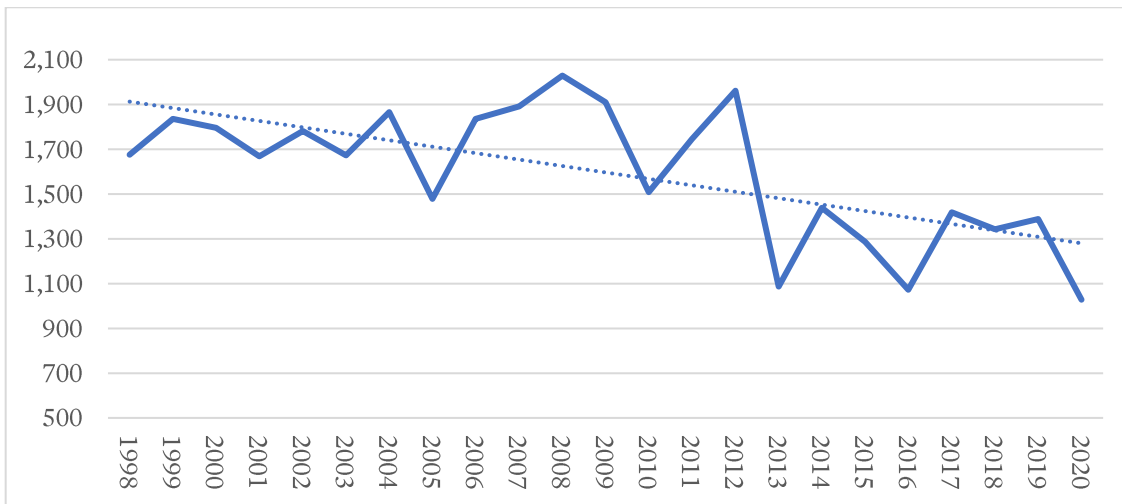


Figure 2. Trend of black bears killed by hunters in California

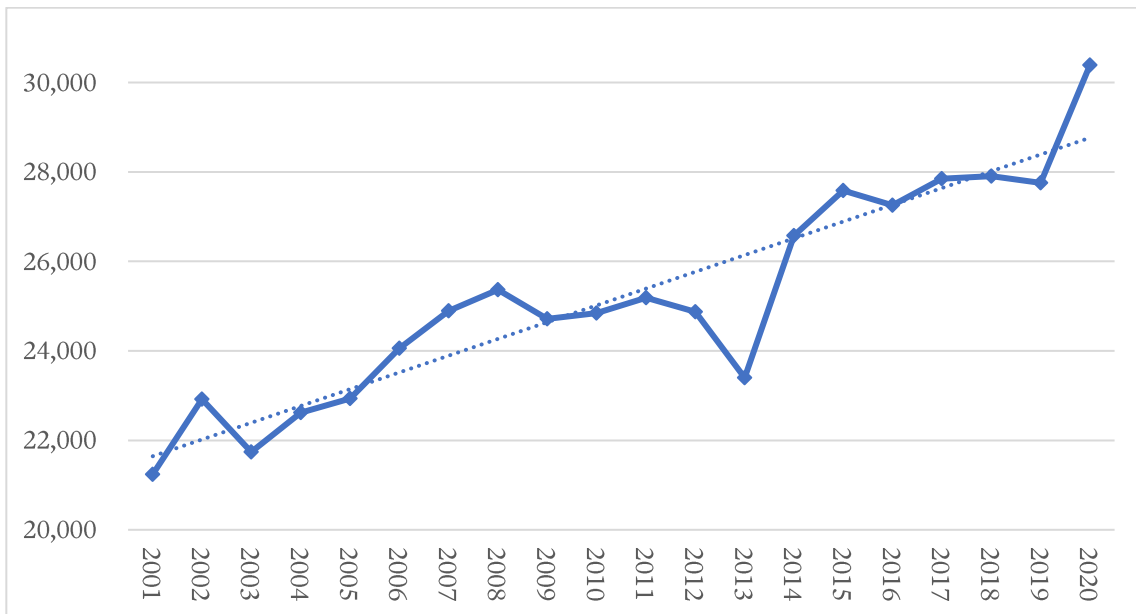


A. DFW’s bear hunter data show that bear hunters are increasing while bears killed are decreasing

In the absence of bear population studies, the only data relied upon by DFW are the numbers of dead bears per year in California. While a record number of hunters turned out in 2020, 30,387 bear hunters, they killed an all-time low number of bears, 1,028, compared to most other years since 1998. Figs. 1 and 2.



Figure 3. Trend of black bear hunters in California



DFW's data also show that since 2013 when hounding was banned, most California bear hunters are opportunistic deer hunters, 58%. Since 2013, only ~43% of bear hunters are dedicated to the activity. The DFW classifies 2% of bear hunters as "other."

Bear poaching is a major issue of concern in California. The 1998 black bear management plan, citing Sitton (1982), suggests that in some areas of California, poaching numbers equal that of legal killing.³⁶ The DFW's bear reports are silent as to the extent of poaching in California, so the public and the Commission are in the dark on this grievous issue. Again, the best available science indicates that bear populations can only withstand offtake in an amount under ten percent annually.³⁷

B. Black bear hunting is unpopular amongst California residents

Bear hunting is highly unpopular with Californians. A 2020 Remington Research poll of likely 2022 California voters found³⁸:

- A supermajority, 70%, do not want California black bears killed for sport. This includes majorities of residents in the top two bear hunting counties from 2020 – Shasta County and Trinity County – who oppose the hunting of bears for sport.
- A supermajority, 71%, agree that wildlife officials should place a priority of non-lethal methods to reduce conflicts between bears and people (e.g., public education, trash management or frightening devices used by game officers) rather than killing bears
- A majority, 62%, would support legislation to stop the hunting of black bears



Figure 4. DFW's black bear hunt data

Year	DFW's bear population estimate	Bear-hunter mortality	% Female bears	# Bear tags sold	% Deer & bear hunters	% Bear Hunters only	% Other hunters	Hunter success rate (%)
2008	37,150	2,029	37	25,631	34	44	8	7.9
2009	31,432 (± 7,991)	1,910	40	24,805	34	56	10	ND
2010	31,432 (± 7,991)	1,508	40	24,859	37	56	8	ND
2011	26,390 (±6,889)	1,745	42	21,581	28	56	16	8
2012	34,002 (±5,561)	1,962	38	24,872	32	67	2	7.9
2013	34,385 (±6,443)	1,087	37	23,397	53	47	1	4.6
2014	35,101 (±6,444)	1,439	42	26,576	51	49	0	5.4
2015	35,484 (±6,444)	1,287	40	27,578	57	39	5	4.7
2016	35,867 (±6,444)	1,072	40	27,253	69	41	2	3.9
2017	23,397 (±7,176)	1,418	40	27,864	63	50	1	5.1
2018	20,801 (±6,269)	1,342	37	27,885	61	39	0	4.8
2019	21,529 (±6,231)	1,389	40	27,755	59	35	6	5
2020	15,934 (±6,163)	1,028	38	30,387	54	45	2	3

Conclusion

The harms from the recent wildfires on California's bear population are currently unknown, as are the effects of hunting and poaching on California's bear population, and the reason behind such a dramatic decline in the estimated population. Therefore, we respectfully request that the 2022 bear hunt be suspended by the Commission until an empirical population study can be conducted, the effects of the wildfires on California's bear population adequately studied, and the bear management plan updated to include the best available science, including social science.

Sincerely,

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Sources cited

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- ⁴ See: Dixie fire assessment here: <https://inciweb.nwcg.gov/incident/article/7811/67107/>
- ⁵ Jared S. Laufenberg et al., "Compounding Effects of Human Development and a Natural Food Shortage on a Black Bear Population Along a Human Development-Wildland Interface," *Biological Conservation* 224 (2018).
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- ⁸ Julie A. Beston, "Variation in Life History and Demography of the American Black Bear," *Journal of Wildlife Management* 75, no. 7 (2011); Lindsay Welfelt, Richard Beausoleil, and Robert Wielgus, "Factors Associated with Black Bear Density and Implications for Management," *The Journal of Wildlife Management* (2019).
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- ¹² Benjamin Ghasemi, "Trophy Hunting and Conservation: Do the Major Ethical Theories Converge in Opposition to Trophy Hunting?," *People and Nature* 3 (2021); A. R. Braczkowski et al., "Who Bites the Bullet First? The Susceptibility of Leopards Panthera Pardus to Trophy Hunting," *Plos One* 10, no. 4 (2015).
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- ¹⁵ Johnson, Lewis, and Breck, "Individual and Population Fitness Consequences Associated with Large Carnivore Use of Residential Development."
- ¹⁶ Ibid.
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- ¹⁸ Craig McLaughlin, "Black Bear Assessment and Strategic Plan," *Maine Department of Inland Fisheries and Wildlife* (1999); Thomas D. Beck et al., "Sociological and Ethical Considerations of Black Bear Hunting," *Proceedings of the Western Black Bear Workshop* 5 (1995); Beston, "Variation in Life History and Demography of the American Black Bear."
- ¹⁹ S. Dobey et al., "Ecology of Florida Black Bears in the Okefenokee-Osceola Ecosystem," *Wildlife Monographs*, no. 158 (2005).
- ²⁰ Garshelis and Hristienko, "State and Provincial Estimates of American Black Bear Numbers Versus Assessments of Population Trend."
- ²¹ A. D. Wallach et al., "What Is an Apex Predator?," *Oikos* 124, no. 11 (2015).
- ²² J. L. Weaver, P. C. Paquet, and L. F. Ruggiero, "Resilience and Conservation of Large Carnivores in the Rocky Mountains," *Conservation Biology* 10, no. 4 (1996); Wallach et al., "What Is an Apex Predator?."



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- ³² Cougar Management Guidelines, *Cougar Management Guidelines*.
- ³³ Garshelis and Hristienko, "State and Provincial Estimates of American Black Bear Numbers Versus Assessments of Population Trend."; Cougar Management Guidelines, *Cougar Management Guidelines*.
- ³⁴ M. S. Enders and S. B. Vander Wall, "Black Bears *Ursus Americanus* Are Effective Seed Dispersers, with a Little Help from Their Friends," *Oikos* 121, no. 4 (2012); L. E. F. Harrer and T. Levi, "The Primacy of Bears as Seed Dispersers in Salmon-Bearing Ecosystems," *Ecosphere* 9, no. 1 (2018); K. Takahashi and K. Takahashi, "Spatial Distribution and Size of Small Canopy Gaps Created by Japanese Black Bears: Estimating Gap Size Using Dropped Branch Measurements," *Bmc Ecology* 13 (2013); T. E. Reimchen and C. H. Fox, "Fine-Scale Spatiotemporal Influences of Salmon on Growth and Nitrogen Signatures of Sitka Spruce Tree Rings," *ibid.*; Remington J. Moll et al., "An Apex Carnivore's Life History Mediates a Predator Cascade," *Oecologia* 196, no. 1 (2021).
- ³⁵ J.T. Bruskotter, M.P. Nelson, and J.A. Vucetich, "Does Nature Possess Intrinsic Value? An Empirical Assessment of Americans' Beliefs.," *The Ohio State University, Columbus OH, USA. DOI: 10.13140/RG.2.1.1867.3129* (2015).



³⁶ California Department of Fish and Game, "Black Bear Management Plan,"

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=82769&inline> (1998): p. 11.

³⁷ Beston, "Variation in Life History and Demography of the American Black Bear." Welfelt, Beausoleil, and Wielgus, "Factors Associated with Black Bear Density and Implications for Management."

³⁸ Remington Research Group, "California Public Opinion," (2020).

Attachment B
Proposed Regulatory Amendments

Cal. Code Regs. tit. 14, § 365 Bear.

Except as provided in Section 366, bear may be taken only as follows:

(a) Areas:

- (1) Northern California: In the counties of Del Norte, Humboldt, Plumas, Shasta, Siskiyou, Tehama and Trinity; and those portions of Lassen and Modoc counties west of the following line: Beginning at Highway 395 and the Sierra-Lassen county line; north on Highway 395 to the junction of Highway 36; west on Highway 36 to the junction of Highway 139; north on Highway 139 to Highway 299; north on Highway 299 to County Road 87; west on County Road 87 to Lookout-Hackamore Road; north on Lookout-Hackamore Road to Highway 139; north on Highway 139 to the Modoc-Siskiyou county line; north on the Modoc-Siskiyou county line to the Oregon border.
- (2) Central California: In the counties of Alpine, Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Lake, Mendocino, Nevada, Placer, Sacramento, Sierra, Sutter, Yolo and Yuba and those portions of Napa and Sonoma counties northeast of Highway 128.
- (3) Southern Sierra: That portion of Kern County west of Highway 14 and east of the following line: Beginning at the intersection of Highway 99 and the Kern-Tulare county line; south on Highway 99 to Highway 166; west and south on Highway 166 to the Kern-Santa Barbara county line; and those portions of Fresno, Madera, Mariposa, Merced, Stanislaus, Tulare and Tuolumne counties east of Highway 99.
- (4) Southern California: In the counties of Los Angeles, Santa Barbara and Ventura; that portion of Riverside County north of Interstate 10 and west of Highway 62; and that portion of San Bernardino County south and west of the following line: Beginning at the intersection of Highway 18 and the Los Angeles-San Bernardino county line; east along Highway 18 to Highway 247; southeast on Highway 247 to Highway 62; southwest along Highway 62 to the Riverside-San Bernardino county line.
- (5) Southeastern Sierra: Those portions of Inyo and Mono counties west of Highway 395; and that portion of Madera County within the following line: Beginning at the junction of the Fresno-Madera-Mono county lines; north and west along the Madera-Mono county line to the boundary of the Inyo-Sierra National Forest; south along the Inyo-Sierra National Forest boundary to the Fresno-Madera county line; north and east on the Fresno-Madera county line to the point of beginning. Also, that portion of Inyo county west of Highway 395; and that portion of Mono county beginning at the intersection of Highway 6 and the Mono county line; north along Highway 6 to the Nevada state line; north along the Nevada state line to the Alpine county line; south along the

Mono-Alpine county line to the Mono-Tuolumne county line and the Inyo National Forest Boundary; south along the Inyo National Forest Boundary to the Inyo-Sierra Forest boundary; south along the Inyo-Sierra Forest boundary to the Fresno-Madera county line; north and east along the Fresno-Madera county line to the junction of the Fresno-Madera-Mono county line; south along the Mono-Fresno county line to the Mono-Inyo County line; east along the Mono-Inyo county line to the point of beginning.

~~(b) Seasons: Except in the deer hunt areas designated as zones X-1 through X-7b in subsection 360(b), the bear season shall open on the opening day of the general deer season as described in subsections 360(a) and (b) and extend until the last Sunday in December in the areas described in subsections 365(a)(1), (2), (3) (4) and (5) above. In those areas designated as deer hunting zones X-1 through X-7b, the bear season shall open on the second Saturday in October and extend for 79 consecutive days. The bear season shall be closed when the department determines that 1,700 bears have been taken pursuant to the reporting requirement in subsection 708.12(d). The department shall notify the commission, the public via the news media and bear tag holders via the U.S. mail and the news media when implementing this closure.~~

- (1) There is no open season for the hunting of bear in those portions of the state described in subsection (a) above.
- (2) The Commission may adopt regulations establishing an open season for the hunting of bear in those portions of the state described in subsection (a) above only after the Department:
 - (A) Using the best available science, completes an empirical and peer-reviewed study of the state's bear population, including but not limited to, developing updated population estimates;
 - (B) Completes a peer-reviewed study on the effects of drought and wildfires since 2018 on the state's bear populations, their habitat, and their food sources; and
 - (C) After completing the studies described in subsections (A) and (B) above, updates the current bear management plan utilizing the best available science, including but not limited to, science related to bear social structure.

(c) Bag and Possession Limit: One adult bear per hunting license year. Cubs and females accompanied by cubs may not be taken. (Cubs are defined as bears less than one year of age or bears weighing less than 50 pounds.)

(d) No open season for bear in the balance of the state not included in subsection (a) above.

(e) Bait: No feed, bait or other materials capable of attracting a bear shall be placed or used for the purpose of taking or pursuing a bear. No bear shall be taken over such bait. No person may take a bear within a 400-yard radius of a garbage dump or bait.

Cal. Code Regs. tit. 14, § 366 Archery Bear Hunting.

Bear may be taken with bow and arrow during the bear season as specified in Section 365 and as follows:

(a) Areas: Those portions of the state as described in subsection 365(a).

~~(b) Season: The archery bear season shall open on the third Saturday in August and extend for 23 consecutive days. There is no open season for taking bear with bow and arrow in the balance of the state.~~

(1) There is no open season for taking bear with bow and arrow in those portions of the state described in subsection 365(a).

(2) The Commission may adopt regulations establishing an open season for taking bear with bow and arrow in those portions of the state described in subsection 365(a) only after the Department:

(A) Using the best available science, completes an empirical and peer-reviewed study of the state's bear populations, including but not limited to, developing updated population estimates;

(B) Completes a peer-reviewed study on the effects of drought and wildfires since 2018 on the state's bear populations, their habitat, and their food sources; and

(C) After completing the studies described in subsections (A) and (B) above, updates the current bear management plan utilizing the best available science, including but not limited to, science related to bear social structure.

(3) There is no open season for taking bear with bow and arrow in the balance of the state not included in subsection 365(a).

(c) Bag and Possession Limit: One adult bear per hunting license year. Cubs and female accompanied by cubs may not be taken. (Cubs are defined as bears less than one year of age or bears weighing less than 50 pounds.)

(d) The use of dogs is prohibited during the archery season for bear.

(e) Bait. No feed, bait or other materials capable of attracting a bear to a feeding area shall be placed or used for the purpose of taking or pursuing a bear. No bear shall be

taken over such bait. No person may take a bear within a 400 yard radius of a garbage dump or bait.