

ASSEMBLY THIRD READING

AB 1382 (Castillo)

As Amended January 5, 2026

Majority vote

SUMMARY

Prohibits selling, offering for sale, or importing for profit a transgenic pet animal in California, subject to certain exceptions.

Major Provisions

- 1) Defines a "cosmetic transgenic trait" as "transgenic trait that alters, modifies, or engineers a transgenic pet animal's appearance or natural functions, which may include, but not be limited to, novel fur, skin, feather, or scale coloring, the removal of claws or vocal cords, or the addition or subtraction of appendages."
- 2) Defines a "transgenic pet animal" as "a pet animal that possesses a transgenic trait, and includes the progeny of a transgenic pet animal."
- 3) Defines a "transgenic trait" as "a trait that has been deliberately altered, modified, or engineered, through means not possible under natural conditions, by insertion of a foreign gene using genetic engineering methods, including, but not limited to, the introduction of chromosomes containing artificially transferred genetic material from any other organism or a laboratory construct, regardless of whether the original source's genetic material was altered, modified, or engineered before insertion, or whether the originally transferred genetic material was inherited through normal reproduction."
- 4) Prohibits a person from selling, offering for sale, or importing for a profit a transgenic pet animal that possesses a cosmetic transgenic trait in California.
- 5) Clarifies that this prohibition is not applicable if:
 - a) The transgenic trait is for the sole purposes of benefitting the health of the animal,
 - b) The transgenic trait is for the sole purpose of enhancing the transgenic pet animal's interaction with humans, and does not alter the natural functions of the animal,
 - c) The transgenic pet animal is an aquatic pet species produced through breeding, conjugation, fermentation, hybridization, in vitro fertilization, or tissue culture, and no transgenic organisms are involved.
 - d) The transgenic pet animal is an aquatic pet species produced through whole genome ploidy manipulation.
- 6) Establishes that each transgenic sold, offered or sale, or imported into the state shall be a separate violation, each punishable by a civil penalty of no less than \$5,000.
- 7) Authorizes the district attorney of the county in which a violation occurred to take an action to enforce this bill's provisions.

COMMENTS

Transgenic Animals. Transgenic animals are genetically modified organisms (GMOs) that have had a foreign gene from another species deliberately inserted into their genome, thus altering their genetic structure and producing a physiological characteristic that does not naturally occur in the organism. Transgenic animals are often used for research or medical purposes; for example, transgenic mice that are modified to can help scientists study the effects of diseases and potential treatments, and recently, the genes of pigs are being modified to develop new solutions for organ transplant. In 2023, scientists at the University of Maryland School of Medicine successfully performed a transplant of a transgenic pig heart into a patient with end-stage cardiovascular disease.

While transgenic animals are primarily used in the fields of science and medicine, there are examples in past decades of transgenic animals being developed for purposes of pet sales and companionship. In 2003, after years of research stemming from breakthroughs in adding fluorescent jellyfish proteins into certain fish species for purposes of studying migration patterns, Yorktown Technologies began to market and sell fluorescent "GloFish" in the United States. Despite early protests from animal rights and consumer watchdog groups, and an initial ban in California, GloFish are sold across the U.S. as ornamental fish and come in many different species: zebrafish, black tetra, rainbow sharks, and more.

Recently, breakthroughs in genomic research and gene editing technology have led to new innovations—and ethical concerns—related to the development of transgenic animals, and particularly transgenic pets. As recently detailed in an article from technology magazine *Wired*, a new startup called "The Los Angeles Project" is experimenting with genetically engineering cosmetic traits in animals, such as glow-in-the-dark rabbits and horned "unicorn" horses. Specifically, the Los Angeles Project has been using methods such as CRISPR gene editing, and "restriction enzyme mediated integration", or "REMI", to delete or integrate new genes in the embryos of species like frogs, hamsters, and rabbits. While such methods have been used in the past for purposes of scientific and medical research, founders of the Los Angeles Project have expressed clear intent in developing transgenic animals for the consumer pet market.

Another recent example of transgenic animals in the news involves the "revival" of the extinct dire wolf by biotechnology company Colossal Biosciences. Receiving significant media coverage, Colossal analyzed a 13,000-year-old dire wolf tooth and a 72,000-year-old ear bone to modify the Deoxyribonucleic Acid (DNA) of gray wolves via CRISPR gene editing to reproduce traits found in the dire wolf samples, such as larger heads, broader shoulders, and a lighter coat. These modified cells were then transferred to denucleated egg cells and implanted into surrogate domesticated dogs. The first "dire wolf" puppies were born in September 2024, and another successfully born in January 2025. Colossal Biosciences has expressed their intent to "de-extinct" other species, such as woolly mammoths, with the eventual goal of reintroducing such species into nature.

Federal and State Regulation of Transgenic Animals. In general, genetically modified animals—and genetically modified organisms generally—are regulated federally by the Food and Drug Administration (FDA). The FDA has three categories of what it deems "Intentional Genetic Alterations", or (IGAs), measured by the risk associated with the IGA product or animal. Risk is measured based on a number of factors, such as the risk to the animal or animal species, the potential to harm consumers or food supplies, and possible environmental impacts.

Specific to regulating transgenic animals produced solely for the consumer market, the FDA has taken little regulatory action. In fact, in December 2003 the agency expressly permitted the commercial sale of GloFish after the pets first began being sold in the market. In its risk assessment, the FDA stated:

Because tropical aquarium fish are not used for food purposes, they pose no threat to the food supply. There is no evidence that these genetically engineered zebra danio fish pose any more threat to the environment than their unmodified counterparts which have long been widely sold in the United States. In the absence of a clear risk to the public health, the FDA finds no reason to regulate these particular fish.

In California, however, regulators have taken a more careful approach. The California Department of Fish and Wildlife (CDFW), via direction from the California Fish and Game Commission (CFGC), regulates the importation, possession, and transport of a wide variety of mammal and aquatic species, including a specific list of "Restricted Species" that are prohibited from being sold or possessed in the state unless expressly permitted by the Commission. Under these restrictions, "Transgenic Aquatic Animals" are included, and are specified to include "freshwater and marine fishes, invertebrates, amphibians, and reptiles".

Regarding GloFish specifically, the CFGC voted in 2004 to deny permission to sell or possess GloFish in California, despite the FDA's then-recent risk assessment permitting the commercialization of GloFish nationally. Commissioners cited concerns regarding potential impact to state ecosystems, and sided with consumer watchdogs who argued the FDA review process was slapdash. California's ban on the sale of GloFish remained for over a decade, until in January 2016 the CDFW issued a letter to Yorktown Technologies reversing the 2004 decision and expressly permitting the sale and possession of GloFish in California. In its letter to Yorktown Technologies, CDFW wrote: "Based on information provided to the California Department of Fish and Wildlife, including species information, scientific reviews, and risk assessments, CDFW determined that ... [GloFish] ... are not detrimental to and pose no reasonably foreseeable risk to California's native fish, wildlife, or plants." Since 2016, subsequent CDFW letters and correspondence have affirmed that GloFish are legal to be sold and possessed in the state.

With concern for the ethical and environmental impacts associated with recent transgenic animal innovations, the author and sponsor have put forward this measure to ban the sale and for-profit import of transgenic pet animals that possess a cosmetic genetic trait. "Cosmetic genetic traits" are defined as "a transgenic trait that alters, modifies, or engineers a transgenic pet animal's appearance or natural functions, which may include, but not be limited to, novel fur, skin, feather, or scale coloring, the removal of claws or vocal cords, or the addition or subtraction of appendage". The bill clarifies that transgenic traits that are either "for the sole purpose of benefiting the health of the... animal" or for "enhancing the [animal's] interaction with humans" (such as promoting hypoallergenic traits) are exempt from this prohibition. Further, recognizing the existing market and proven safety of transgenic pet fish like GloFish, the bill exempts such aquatic pets from the prohibition as well. Each violation of a prohibition under this bill would be punishable by a civil penalty of no less than \$5,000 per violation, and authorizes the district attorney of the county in which a violation occurred to take an action to enforce this bill's provisions.

In short, the author and sponsor have put forward this measure to ask the Legislature if, while commercial scientists become increasingly occupied with whether cosmetic traits *could* be added to animals through gene manipulation, whether such traits *should* be.

According to the Author

"AB 1382 is a necessary response to a troubling trend: the commercialization of gene-edited pets. Gene editing should be reserved for advancing medical research and addressing critical ecological challenges, not for turning animals into living accessories. This reckless commercialization trivializes the ethical implications of genetic modification and exposes animals to unknown health risks. Beyond the potential for unintended genetic consequences, introducing gene-edited pets into the mainstream market could have severe repercussions, including disruptions to ecosystems if these animals were to escape or be released. Additionally, it paves the way for exploitative breeding practices, where profit-driven motives outweigh the well-being of the animals involved. Our shelters are already overflowing with overbred dogs, cats and rabbits. California must draw a clear line: animals are not commodities, and we will not allow genetic consumerism to dictate their future."

Arguments in Support

This bill is sponsored by *Social Compassion in Legislation*, who writes: "Driven by advancements in genetic modification technologies, the intentional genomic alteration of animals has become a frontier for development. While investments have been made to further this endeavor for potentially beneficial medical advancements, some companies have begun the development of genetically modified cats, dogs, and other pets with altered appearances to fulfill consumer demand for "designer" traits, despite unknown long-term health risks. These genetic modifications run the risk of prioritizing aesthetics over the well-being of the animal, as well as drive consumer demand for novelty pets when there already exists a pet overpopulation crisis."

Arguments in Opposition

This bill is opposed by *Pet Advocacy Network*, who writes: "[this bill] would override existing science-based regulatory determinations, disrupt lawful commerce, reduce consumer choice, and set a troubling precedent for banning regulated products based on aesthetics rather than evidence—all without providing any measurable animal-welfare benefit. AB 1382 would open the door to banning regulated products based on aesthetics or perception rather than science."

FISCAL COMMENTS

This bill is keyed non-fiscal by the Legislative Counsel.

VOTES

ASM BUSINESS AND PROFESSIONS: 17-0-1

YES: Berman, Johnson, Ahrens, Alanis, Bains, Bauer-Kahan, Caloza, Chen, Elhawary, Hadwick, Haney, Irwin, Jackson, Krell, Macedo, Nguyen, Pellerin

ABS, ABST OR NV: Lowenthal

ASM JUDICIARY: 12-0-0

YES: Kalra, Dixon, Bauer-Kahan, Bryan, Connolly, Harabedian, Macedo, Pacheco, Papan, Johnson, Stefani, Zbur

UPDATED

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