JOSH GREEN, M.D.
Governor

SYLVIA LUKE
Lt. Governor

SHARON HURD
Chairperson
Board of Agriculture & Biosecurity

DEAN M. MATSUKAWA
Deputy to the Chairperson

State of Hawai'i
DEPARTMENT OF AGRICULTURE & BIOSECURITY
KA 'OIHANA MAHI'AI A KIA'I MEAOLA
1428 South King Street
Honolulu, Hawai'i 96814-2512
Phone: (808) 973-9560 FAX: (808) 973-9613

April 2, 2026

TO: Advisory Committee on Plants and Animals

FROM: Michael J. Botha
Owner
Aloha Bison, LLC
59-426 Kawowo Place
Haleiwa, Hawaii 96712

THROUGH: Jessica Ann Miura
Acting Land Vertebrate Specialist
Hawaii Department of Agriculture and Biosecurity
Plant Quarantine Branch

SUBJECT: Request to: (1) Allow the Importation and Possession of Twenty-seven (27) Plains Bison, *Bison bison,* an Animal on the List of Restricted Animals (Part B), by Permit, for Breeding and Commercial Meat Production, by Aloha Bison, LLC; and

(2) Update Permit Conditions for the Importation and Possession of Plains Bison, *Bison bison*, an Animal on the List of Restricted Animals (Part B), by Permit, for Breeding and Commercial Meat Production, by Aloha Bison, LLC.

I. Summary Description of the Request

PQB NOTES: *The Plant Quarantine Branch (PQB) submittal for requests for import or possession permits, as revised, distinguishes information provided by the applicant from procedural information and advisory comment and evaluation presented by PQB. With the exception of PQB notes, hereafter "PQB NOTES," the text shown below in Section II from page 2 through page 22 of the submittal was taken directly from the Aloha Bison, LLC's application and subsequent written communications provided by the applicant Mr. Michael J. Botha. For instance, the statements on pages 16-21 regarding effects on the environment are the applicant's statements in response to standard PQB questions and*

are not PQB's statements. This approach for PQB submittals aims for greater applicant participation in presenting import requests in order to move these requests to the Board of Agriculture and Biosecurity (Board) more quickly, while distinguishing applicant provided information from PQB information. The portion of the submittal prepared by PQB, including the Proposed Import Permit Conditions and Advisory Subcommittee Review, is identified as Sections III and IV of the submittal, which starts on pages 23 and 29, respectively.

We have a request to review the following:

COMMODITY: Twenty-seven (27) Plains Bison, *Bison bison*
(Refer to Appendix A for Permit Application).

SHIPPERS: Michael J. Botha, Big Sky Bison, LLC,
234 Vaughn North Frontage Road, Vaughn, Montana 59487
Phone No.: (808) 478-1479.

IMPORTER: Michael J. Botha, Aloha Bison, LLC,
59-426 Kawowo Place, Haleiwa, Hawaii 96712
Phone No.: (808) 478-1479.

CATEGORY: Plains Bison, *Bison bison,* are on the List of Restricted Animals (Part B). Pursuant to Hawaii Administrative Rules (HAR) §4-71-6.5, Bison (*Bison bison),* may be imported into Hawaii for government use, or private and commercial use, including research, or zoological parks.

II. Information Provided by the Applicant in Support of the Application

PROJECT:

- Aloha Bison's mission is to inspire a thriving future by raising healthy, naturally nurtured bison in Hawaii through regenerative agriculture practices, revitalizing our land, enriching ecosystems, and nourishing our island communities with ethical, wholesome meat.
- Our Regenerative Philosophy - We believe that raising bison should work with nature, not against it. At Aloha Bison, everything is connected—our animals, the soil, the water, the plants, and the people. Regenerative ranching means improving the health of the land every year, building stronger soil, protecting native wildlife, and supporting a thriving, pasture-raised bison herd.
- We use rotational grazing to mimic how wild bison once moved across the plains. This helps the land recover, encourages the growth of native grasses and forbs, and boosts the ecosystem around us. Our ranch is more than just a place to raise bison—it's a living, breathing landscape where

nature thrives.

- Our grazing practices benefit more than bison. By avoiding chemicals and protecting plant diversity, we create a rich habitat for wildlife especially birds, and pollinators. Our efforts help maintain a balanced ecosystem, where every creature has a role to play.
- At Aloha Bison, we raise more than just bison, grow healthy soil, support native wildlife, and protect the land we love. It's our mission to raise healthy, naturally nurtured bison in Hawaii through regenerative agriculture practices, revitalizing our land, enriching ecosystems, and nourishing our island communities with ethical, wholesome meat.

PQB NOTES: *Mr. Botha provided a Certificate of Compliance with the Audubon Conservation Ranching Program for "Grazed on Audubon Certified Bird Friendly Land" in Montana. Please see Attachment 1 for the certificate.*

OBJECTIVE:

Introducing Bison to the North Shore of Oahu, Hawaii: Project Objective
A Sustainable Approach to Agriculture and Nutrition

Objective

The primary goal of this project is to introduce a foundation herd of Plains Bison to the North Shore of Oahu, in Hawaii. And utilize regenerative agriculture practices to ethically raise bison and produce healthy, nutritious grass-fed meat for local island communities. This initiative aims to create a sustainable agricultural model that not only supports the local ecosystem but also provides a reliable source of high-quality protein to enhance food security in Hawaii and promote better health among island communities.

Importance of Bison to the Project

Bison, as a keystone species, play a vital role in maintaining the health of grassland ecosystems. Their natural grazing habits help to regenerate the soil, promote biodiversity, and reduce the need for chemical fertilizers and pesticides. The introduction of bison to Hawaii is expected to have numerous ecological benefits, such as improving soil health, increasing water retention, and fostering native plant growth. Moreover, bison meat is known for its high nutritional value, being rich in protein, omega-3 fatty acids, and essential vitamins and minerals, making it an ideal addition to the diet of the local island communities.

Utilization of Bison

The bison will be raised on rotational grazing systems, which mimic their natural grazing patterns and allow for the recovery and regeneration of pastures. This approach will ensure that the land remains fertile and productive, while minimizing the

environmental impact of livestock farming. The project will also focus on ethical animal husbandry practices, ensuring that the bison are treated with care and respect throughout their lives. We practice low pressure stockmanship strategies, and allow our bison to live out their lives as naturally as possible, our goal is that our bison only experience one bad day in their life. This includes providing ample space for roaming, access to clean water, no unnecessary stress and a diet free from antibiotics and hormones.

Project Timeline

- **Phase 1**: Feasibility Study and Planning (Months 1-6) - Conduct thorough research on the logistical requirements, and community acceptance of introducing bison to Hawaii. Develop a comprehensive project plan, including budget, resources, and timelines. Current status: Started 12/15/24 expected completion 6/15/25
- **Phase 2:** Infrastructure Development (Months 7-12) - Establish the necessary infrastructure, such as fencing, water systems, and grazing areas, to support the bison. Secure DAB permits and approvals from relevant authorities. Current status: Pending DAB application approval. Application submitted 5/21/25 expected completion 12/15/25

PQB NOTES: *Should this request be approved, a permit shall not be issued until a site inspection has been conducted and it has been verified that the site is capable of securely housing the animals.*

- **Phase 3:** Introduction of Bison (Months 13-18) - Transport and introduce the first herd of bison to the designated grazing areas. Monitor their adaptation to the new environment and make necessary adjustments to ensure their well-being. Current status: Pending start 01/15/26 expected completion 6/15/26
- **Phase 4:** Ongoing Management and Evaluation (Months 19-36) - Implement rotational grazing systems, monitor soil health, and assess the overall impact of the project. Engage with local communities to promote awareness and support for sustainable agriculture practices. Current status: Started 06/16/26 expected completion 06/15/27
- **Phase 5:** Expansion and Optimization (Beyond Month 36) - Evaluate the success of the initial phase and explore opportunities for expanding the project to include increasing the herd size by importing additional stud bison bulls from different genetic lineage. Continuously optimize management strategies to ensure long-term sustainability. Current status: Pending 01/01/28 and ongoing

Conclusion

This project represents a significant step towards creating a sustainable and ethical holistic agricultural model in Hawaii. By introducing bison to the islands and employing

regenerative agriculture practices, we aim to improve the health of the local ecosystem, enhance food security in Hawaii and provide affordable high-quality meat protein to the island communities. Through careful planning, community engagement, and ongoing management, this initiative has the potential to make a lasting positive impact on the environment and the well-being of local populations.

PROCEDURE:

Raising Bison to Produce Healthy Meat in Hawaii
Procedures and Timeline

Introduction

Raising bison to produce healthy meat involves a series of detailed procedures to ensure our animals' welfare and maximize meat yield. This guide provides a comprehensive overview of the breeding process, the ideal age and size for slaughter, and the expected meat yield from a meat bison in Hawaii.

Breeding and Calf Production

Breeding Age

Bison typically reaches sexual maturity at different ages based on their gender:

- Females (Cows): Generally, bison cows can start breeding at around 2-3 years of age. However, it is often recommended to allow cows to reach at least 3 years old to ensure they are physically mature enough to carry and nurture a calf effectively.
- Males (Bulls): Bulls can begin breeding at approximately 2 years of age, but they are often more effective breeders at around 3 years old and beyond when they are fully mature and more dominant.

Calving Season

The calving season typically occurs in the late spring to early summer (May to June). This timing takes advantage of the optimal weather conditions and abundant forage availability, which support the nutritional needs of the cow and her calf.

Ideal Age and Size for Slaughter

Age for Slaughter

We have found that the ideal age for slaughtering bison for meat production is generally between 24 to 30 months. At this age, bison have typically reached a good balance between size, meat quality, and feed efficiency.

Plains Bison, *Bison bison*
Aloha Bison, LLC

Size for Slaughter

We prefer to slaughter bison when they reach a live weight of around 1,100 to 1,300 pounds. This weight range ensures that the meat is tender and has a desirable flavor profile.

Meat Yield Expectations

The amount of meat yield from a bison can vary based on several factors, including the animal's diet, health, and overall management. However, some general expectations for meat yield from a meat bison include:

- Dressed Weight: The dressed weight (carcass weight after the hide, head, and internal organs are removed) is typically about 55-60% of the live weight. For example, a bison with a live weight of 1,200 pounds may have a dressed weight of approximately 660 to 720 pounds.
- Meat Yield: The actual meat yield (boneless, trimmed meat) from the dressed carcass is around 60-65% of the dressed weight. Using the example above, the meat yield would be approximately 396 to 468 pounds.

Conclusion

Raising bison for meat production requires careful attention to their breeding, growth, and slaughter processes to ensure high-quality meat yield. By following the outlined procedures and timelines, we optimize the health and productivity of our bison, resulting in nutritious, healthy and flavorful bison meat for our island communities.

DISCUSSION:

1. Person Responsible:

- Person responsible:
  - Michael J Botha will be responsible and accountable for the safeguarding and use of the bison.
  - Mail/Home address: 59-426 Kawowo Pl, Haleiwa, HI 96712
  - Phone (808) 478-1479
  - We have reserved the name Aloha Bison LLC with DCCA and intend to register Aloha Bison LLC as a new Hawaii LLC in the coming weeks. Aloha Bison LLC will be the name of the entity that operates the bison enterprise. Michael J Botha will own Aloha Bison LLC.
- Summary of Experience:
  - Michael J Botha is a 57-year-old entrepreneur who spent 21 years (1996- 2017) living full time on the North Shore of Oahu where he founded Sandwich Isle Pest Solutions. Starting as a one-man operation based on Oahu's North Shore, Michael grew Sandwich Isle Pest Solutions to become one of the largest pest management

businesses in Hawaii and earned a position in the Top 100 Pest Management Business in the entire country. In 2016 Michael sold Sandwich Isle to Terminix International, moved to Montana full time, and founded a real estate investment business and other business ventures. Michael owns a home in Pupukea where he and his family stay while in Hawaii. Michael and his family plan to move back and to live full time in Hawaii, once we have received approval for our application to import bison and Aloha Bison becomes operational.

- Michael founded, owns and operates Big Sky Bison, a regenerative bison ranch that raises grass fed bison, sells live animals to other producers, produces bison meat products, operates a visitor and bison education program, and offers bison hunting opportunities in Central Montana.
- In 2018 Michael purchased a top-quality foundation herd of 28 bred bison heifers and 2 stud bison bulls and began bison operations on leased private grazing land near Bozeman, MT. In 2020, Michael purchased a 1,200-acre ranch, which he converted from an existing cattle operation to a new bison operation, this is where Big Sky Bison operates today. Big Sky Bison produces top quality bison and offers healthy grass-fed bison meat and bison products throughout Montana and around the country.
- Michael has been actively involved in the bison industry since 2018 and is a member of the National Bison Association and Montana Bison Association where he has served as Director.
- Aside from overseeing all operations at Big Sky Bison, Michael personally guides bison hunters and completes an average of 50 bison hunts per year.

- Resume:
  - Please see attached as a separate document (Refer to Appendix B).

2. Safeguard Facility and Practices

List of Facility Details

Facility Name: G Tree Ranch owned by the Kelley Family is the name of the property that Aloha Bison will be leasing the land from.

Physical Address: 67-150 Farrington Hwy, Waialua, HI 96791

The Tax Map Keys (TMK's) for the ranch are 6-7-2-40 and 6-7-2-43.

Entry Gate Address: 67-172 Farrington Hwy, Waialua, HI 96791 This is the driveway location, which is shared with Corteva.

City: Waialua

Plains Bison, *Bison bison*
Aloha Bison, LLC

Zip Code: 96791

Phone Number: (808) 478-1479

Fax Number: none

Organism Storage and Use Location: On-site at Aloha Bison located on G Tree Ranch, within designated grazing pastures.

PQB NOTES: *Aloha Bison, LLC. submitted 'Maps and Directions,' which are included as Attachment 2 for reference.*

Pictures of the Facility:

Images of Aloha Bison's "future facility" are not available. Presently the land is in a raw and unimproved state. We do not intend to build fences or construct improvements on the leased land until we have received conditional approval that our application to import bison will be approved. Once we receive conditional approval, we will begin construction of the required bison enclosure and corral system. Existing barbed wire perimeter and cross fences are already installed; however, we will need to build new fences to accommodate Plant Quarantine Branch requirements for fencing bison.

PQB NOTES: *Aloha Bison, LLC submitted photographs of the proposed facility site, as referenced in Attachment 3.*

Future Facility Appearance:

Expect open grazing pastures with native grasses, brushy open forest as depicted in the pictures of the actual property above. There will be fenced areas and a corral system for bison, and possibly a visitor center for community engagement. The landscape features lush, tropical vegetation typical of the North Shore of Oahu.

Effluent Drain/Sump:

We do not presently have plans to construct permanent bathrooms or permanent commercial buildings. Initially we will have Portable Toilets serviced by a local vendor.

Nearby Bodies of Water:

In Waialua, potential nearby bodies include the smaller drainages and seasonal streams that may feed into the Pacific Ocean. Ranch operations are not anticipated to produce any wastewater; therefore, no direct wastewater will be discharged into drainages, streams or the ocean.

Specific Container or System for Organism Storage and Use:

Organism: Bison (live animals for grazing and meat production).

Storage System:

Perimeter Fence and Grazing Pastures: Bison will be confined and kept in open, fenced pastures designed to comply with all Plant Quarantine Branch requirements as detailed in PQB Permit Conditions Publication Section 9 A-E. We have used 4-point barbed wire fences with 100% success for the past five years at Big Sky Bison ranch, therefore we will prefer to use this PQB option. Our pastures will be designed for rotational grazing to promote soil health and prevent overgrazing, aligning with our mission to revitalize our land, enriching ecosystems.

Corral and Holding Pens: Temporary holding pens will be constructed and purpose-built to handle bison for veterinary checks, annual bison works or before transport to a USDA slaughterhouse. These pens will be designed to minimize stress, with adequate stock water access.

Processing Facility: For meat production, bison may be processed off site in a local facility compliant with USDA and Hawaii DOH standards.

3. Method of Disposition:

1. Post-Project or Termination Handling of Bison

- Continued Operation (Preferred Scenario):
    - Action: If the project (defined as ongoing bison ranching for meat production) continues beyond its initial scope or is not terminated, bison will remain on-site as part of Aloha Bison's regenerative agriculture mission to produce wholesome meat and support Hawaii's food security.
    - Rationale: Our mission emphasizes sustainable, long-term production, so bison will continue to be raised, grazed rotationally, and processed for local consumption, maintaining herd size through natural breeding or importation of additional stud bulls.
    - Storage Conditions: Live bison will be kept in fenced pastures (PQB recommended and approved fencing) with access to native grasses, shade, and water. Pastures are designed for regenerative grazing to promote soil health and prevent overgrazing. Meat from processed bison is stored in USDA-compliant walk-in coolers (35–40°F) with vacuum- sealed packaging to ensure freshness.
    - Why Not Destroyed: Bison are a valuable agricultural resource contributing to food security and ecosystem restoration. Destruction

is unnecessary unless required by disease control or regulatory mandates.

- Project Termination (e.g., Business Closure or Regulatory Requirement):
  - Action: If the project is terminated, bison will be:
    - Sold or Transferred: Healthy bison will be sold to other DAB-approved ranches in Hawaii or mainland U.S. facilities. With DAB approval, priority will be given to local ranches to support Hawaii's agricultural economy.
    - Processed for Meat: A portion of the herd may be humanely slaughtered at a USDA-inspected facility, with meat distributed to local markets or donated to community food banks to enhance food security.
    - Euthanasia: If sale or processing is not feasible (e.g., due to disease or regulatory restrictions), bison will be humanely euthanized by precision field harvest, with carcasses disposed of per DAB protocols (see below for disposal details).
  - Shipping:
    - How: Bison will be transported in heavy-duty livestock trailers with secure latches, cleaned, and disinfected before and after use to prevent disease spread. Transport complies with DAB and USDA interstate livestock movement regulations.
    - Where: Potential destinations include DAB-approved ranches on other Hawaiian islands or mainland bison facilities. Permits will be obtained from DAB's Livestock Disease Control Branch (808-483-7106).
    - Documentation: Health certificates and movement permits will accompany each animal, ensuring traceability and biosecurity compliance.
  - Conditions: Shipping will occur only under veterinary supervision, with bison inspected for health and vaccinated as required. Transport vehicles will avoid populated areas to minimize escape risks
- Conditions for Use:
  - Bison will continue to be used for meat production, supporting local food security, and as part of regenerative agriculture. They will graze in rotational pastures to enhance soil health and ecosystem vitality, as per the mission statement.
  - Use will occur under DAB and USDA oversight, with required veterinary checks to ensure animal welfare and compliance with food safety standards.

- Conditions for Storage:
    - Live Bison: Stored in secure pastures with high-strength fencing, water troughs, and shade structures to minimize stress. Pastures are monitored daily for fence integrity and weekly for environmental conditions.
- Conditions for Destruction:
    - Destruction will occur only if mandated by DAB or USDA due to a contagious disease outbreak (e.g., bovine tuberculosis, brucellosis) or if bison cannot be sold/transferred.
    - Method: Humane euthanasia by precision field harvest. Carcasses will be incinerated or buried in a designated disposal site approved by DAB, following Hawaii's environmental regulations to prevent contamination.
    - Conditions: Destruction will be supervised by DAB officials, with biosecurity measures (e.g., isolation of affected animals, disinfection of equipment) to prevent disease spread.

2. Handling of Deceased Bison (Due to Disease or Other Causes)

- Disposal Procedures:
    - Natural Death or Non-Disease Causes:
        - Action: Deceased bison will be examined by a veterinarian to confirm the cause of death. If no contagious disease is detected, carcasses will be disposed of via:
            - Composting: Carcasses are composted in covered, aerated piles on-site, following and USDA guidelines for livestock mortality composting. This method supports regenerative agriculture by returning nutrients to the soil.
            - Rendering: If composting is not feasible, carcasses are sent to an DAB-approved rendering facility.
            - Burial: Carcasses are buried in a designated, DAB-approved deep pit (at least 4 feet deep) away from water sources to prevent contamination.
        - Conditions: Disposal sites are located at least 500 feet from streams, wells, or the Pacific Ocean, per Hawaii's environmental regulations.

- Disease-Related Death:
    - Action: If death is due to a reportable disease (e.g., brucellosis), the carcass is isolated immediately, and DAB's Livestock Disease Control Branch is notified within 24 hours (808-483-7106). Disposal options include:
        - Incineration: Method for contagious diseases, using a licensed incinerator facility to destroy pathogens.
        - Deep Burial: Carcasses are buried in an DAB-approved site with lime treatment to neutralize pathogens, ensuring no contact with groundwater.
        - Conditions: Diseased carcasses are handled with PPE (gloves, masks, coveralls) by trained staff. The area is cordoned off, and all equipment is disinfected to prevent disease spread.
- Procedures to Prevent Contamination or Disease Spread:
    - Quarantine Protocol: If a bison shows signs of illness, it is immediately moved to an isolated holding pen (steel-reinforced, separate from main pastures) for veterinary evaluation. The pen is located at least 100 feet from other animals and water sources.
    - Disease Surveillance: Monthly veterinary inspections and RFID monitoring (e.g., HerdDogg system) track health metrics (e.g., temperature, weight loss) to detect diseases early. Blood samples are tested for reportable diseases per DAB requirements.
    - Staff Training: Annual biosecurity training ensures staff follow DAB protocols for handling deceased animals, including proper PPE use and reporting procedures.
    - Environmental Protection: Disposal sites are monitored to ensure no runoff reaches nearby bodies of water, complying with the Clean Water Act and DOH wastewater rules.

4. Abstract of Organisms:

a. Plains Bison - *Bison bison bison*

We will be importing Plains Bison from Big Sky Bison in Montana.

A bison (pl.: bison) is a large bovine in the genus Bison (Greek: "wild ox" (bison)) within the tribe Bovini. Of the two surviving species, the American bison, *B. bison*, found only in North America, is the more numerous. The North American species is composed of two subspecies, the Plains bison,

B. b. bison, and the generally more northern wood bison, *B. b. athabascae*. Bison species have been traditionally classified in their own genus, modern genetics indicates that they are nested within the genus Bos, which includes, among others, cattle, yaks and gaur, being most closely related to yaks.

b. The American bison are the largest surviving terrestrial animals in North America. They are typical artiodactyl (cloven hooved) ungulates and are similar in appearance to other bovines such as cattle and true buffalo. They are broad and muscular with shaggy coats of long hair. Adults grow up to 2 meters (6 feet 7 inches) in height and 3.5 m (11 ft 6 in) in length for American bison. American bison can weigh from around 400 to 1,270 kilograms (880 to 2,800 pounds). Bison are nomadic grazers and travel in herds. Towards the end of the summer, for the reproductive season, the sexes necessarily commingle. Bison may live to 20 years of age. Female bison ("cows") typically reproduce after three years of age and can continue beyond 19 years of age. Cows produce calves annually as long as their nutrition is sufficient, but not after years when weight gain is low. Reproduction is dependent on a cow's mass and age. Heavier cows produce heavier calves (weighed in the fall at weaning), and weights of calves are lower for older cows.

c. Bison are ruminants, able to ferment cellulose in a specialized stomach prior to digestion. Bison consume grasses and sedges, and a wide variety of plants including woody plants and herbaceous eudicots. Over the course of the year, bison shift which plants they select in their diet based on which plants have the highest protein or energy concentrations at a given time and will reliably consume the same species of plants across years.

d. American bison once roamed the entire continent of America from high elevation mountain areas to sea level and coastal areas. Today bison are confined to a number of National and State Parks and private land throughout most states in the USA. Typical habitats are open or semi open grasslands, as well as sagebrush, semiarid lands, and scrublands and forest. Some heavily wooded areas are also known historically to have supported bison. Bison also graze in hilly or mountainous areas where the slopes are surprisingly steep.

e. There is not a high degree of potential for bison to become established in Hawaii should an animal escape. As mentioned above (4. A, B, C) if bison escape, they are easily eradicated by targeted elimination or hunting. Bison are massive animals that are easy to find, prefer to stay in herds, prefer to graze in open grass areas and need to drink water every day. Considering the above, an escaped bison will be easy to find and

eradicate. Another thing to consider is that to become established; it would require that both bull and heifer bison escape and elope together, in order to breed. Cow bison can have only one calf per year.

f. Bison are considered a valuable commodity. Bison are not considered a pest or nuisance in their native range, or where they have become established. There is growing interest throughout most states in the USA in raising bison for commercial meat consumption.

g. Bison are highly adaptable and can live in a wide range of climates, from extreme heat to extreme cold. Their thick coats and efficient digestive systems allow them to thrive in varying temperatures. In warmer climates bison do not grow thick winter fur as they do in colder climates. We have observed our own Big Sky Bison herd located in Central Montana flourish in extreme temperatures ranging from -55 degrees Fahrenheit during harsh winter conditions to +102 degrees Fahrenheit during extreme hot drought conditions in summer.

h. Bison (*Bison bison)* are considered semi-domesticated or minimally domesticated. Unlike cattle, which have undergone thousands of years of selective breeding for docility and productivity, bison retain much of their wild nature. They are larger, stronger, and less predictable, requiring specialized handling and robust infrastructure. Bison are adapted to natural grazing behaviors and thrive in open pastures, aligning with regenerative agriculture practices. Bison are cultivated for commercial purposes, primarily for meat production. Their meat is valued for its lean, nutrient-rich profile, appealing to health-conscious consumers and supporting Hawaii's food security by reducing reliance on imported meat. Bison are also raised for hides, bones, and occasionally tourism (e.g., ranch tours), though meat is the primary commercial focus. Commercial bison ranching is less widespread than cattle ranching due to higher infrastructure costs and handling challenges. In the U.S., the National Bison Association (2025 data) estimates 400,000 bison, compared to 90 million cattle.

i. In their native range, privately owned bison are required to be kept confined upon their private property and kept separate from wild bison herds. Bison may exhibit aggressive behavior towards other bovines such as cattle.

j. List diseases or other pests associated with the organism.

- Bovine Tuberculosis (TB)
- Brucellosis
- Bovine Respiratory Disease Complex (BRDC)
- Parasitic Infections (Internal and External)

- Clostridial Diseases (e.g., Blackleg, Tetanus)
- Malignant Catarrhal Fever (MCF)

k. Bison, like other large mammals, are not inherently toxic or pathogenic. Their meat, organs, and byproducts are generally safe for human consumption when properly handled, processed, and cooked. However, there are specific contexts where bison could pose health risks related to toxicity or pathogenicity:

- Pathogenic Risks:
    - Bacterial Infections: Bison can carry pathogens like *Brucella abortus* (causing brucellosis), *Mycobacterium bovis* (bovine tuberculosis), or *E. coli*. These can be transmitted to humans through contact with infected animals, consumption of undercooked meat, or unpasteurized dairy products. Brucellosis, for instance, is a significant concern in some wild bison populations, particularly in areas like Yellowstone National Park, where it can spread to cattle or humans.
    - Parasites: Bison may harbor parasites such as *Toxoplasma gondii* or *Trichinella* species, which can be transmitted through undercooked meat. Proper cooking eliminates this risk.
    - Zoonotic Diseases: Direct contact with bison (e.g., through hunting, butchering, or handling) can expose humans to zoonotic diseases if the animal is infected. Standard hygiene practices, like wearing gloves and thoroughly cooking meat, mitigate these risks.
- Toxicity Risks:
    - Environmental Contaminants: Bison grazing in contaminated areas may accumulate toxins like heavy metals (e.g., lead, mercury) or pesticides in their tissues. This is not unique to bison but depends on their environment. For example, bison near industrial or mining sites could have elevated levels of contaminants.
    - Plant Toxins: Bison may consume toxic plants (e.g., locoweed or certain alkaloid-containing plants) in their diet, which could theoretically accumulate in their tissues. However, bison have evolved to avoid most toxic plants, and such cases are rare.
    - Improper Handling: Spoilage due to improper storage or processing of bison meat can lead to the growth of toxigenic bacteria like *Clostridium botulinum*, which produces botulinum toxin. This is a risk for any meat, not specific to bison.

- Allergic Reactions:
    - Some individuals may have allergic reactions to bison fur or meat, similar to red meat allergies (e.g., alpha-gal syndrome, often linked to tick bites). This is not toxicity but an immune response.
- Mitigation:
    - Cooking: Thoroughly cooking bison meat to an internal temperature of at least 160°F (71°C) kills most pathogens and parasites.
    - Source Verification: Sourcing bison from reputable farms or regulated hunting areas reduces the risk of environmental contaminants or diseases.
    - Hygiene: Proper handling and sanitation during butchering and preparation prevent contamination.

In summary, bison are not inherently toxic or pathogenic, but like any livestock or wild game, they can carry pathogens or environmental toxins under certain conditions. Safe handling, cooking, and sourcing practices effectively eliminate these risks.

5. Effects on the Environment:

a. Bison are herd animals with a very strong herding instinct. Bison do not like to be separated from their herd mates and will attempt to rejoin their herd whenever they become separated. In the unlikely event that bison become separated from the herd and/or escape their enclosure, the first step will be to attempt to lead them back to their herd using non-lethal stockmanship strategies. If the bison do not comply with the attempts to return them to their enclosure, they will be humanely euthanized with a precision rifle shot to the axis bone (top segment of their vertebrae). Using a single 180 grain .308 cartridge or similar will render the bison dead upon bullet impact. This is the process we use for humane field harvest at Big Sky Bison.

If bison were somehow able to become established in the wild they will be easy to track, find and eradicate. Bison are massive herd animals; they usually stick together in tight herd structures and prefer to graze in open grassy areas. Bison need to drink up to twelve gallons of water per day, so they will need to travel to watering sites daily. Once bison have been tracked down, they can be easily dispatched with a precision rifle shot to the axis bone (neck) or a broadside shot to the vital organs including heart and lungs. Another thing to consider is that to become established; it

would require that both bull and heifer bison escape and elope undetected together, in order to breed. Cow bison typically come into heat in July and bear calves in May and can have only one calf per year.

Potential impact of pathogens, parasites that may accompany this introduction - We intend to address this by following all precautions recommended by the Plant Quarantine Branch and Animal Disease Control Branch pertaining to bison shall be followed and adhered to prior to, and post importation to Hawaii.

b. **Environmental impact** - Bison will be confined to their fenced areas where they will be selectively rotated though pastures as part of a regenerative grazing process. Bison hoof action forces organic materials into the soil and improves water retention of the soil. Urination and defecation introduce nutrients to soils that improve the soil profile. Bison will drink water from water troughs supplied by a water well already in operation on the property. Bison do not make much sound, aside from deep low volume grunts as they communicate within their herd. Bison do not moo or make other loud sounds often observed around cattle.

Economic impact – Bison will be raised and produced for local meat consumption in Hawaii. Our average 1,000 lbs. meat bison at our ranch in Montana generates $6,120 in meat sales revenue. We anticipate a similar pricing strategy for Hawaii, which equals a meat value of approximately $17.00 per 1 lbs. of boneless cuts of meat. A typical 1,000 lbs. live bison produces 36% of its live weight in boneless cuts of meat; therefore 1,000 lbs. x 36%=360 lbs. of boneless cuts of meat x $17.00 per 1 lbs. = $6,120 potential meat sales per bison. We will market our locally produced bison meat products directly to consumers and to leading local restaurants, health food stores and grocery stores. Hawaii Meats Processing at their Central Oahu location has agreed to charge approximately $1,100 to slaughter and process a single meat bison under USDA inspection. We intend to employ members from the local community to work in the bison production enterprise and potential bison agritourism (bison field tours) enterprise. We intend to follow the successful model for agritourism that we presently employ at Big Sky Bison, www.bigskybison.com our bison ranch in Montana. We intend offering a daily visitor program that will include guided bison field tours, educational/school tours and events, bison burger food truck, and possibly farm store meat sales.

Societal impact – Aloha Bison's mission is to inspire a thriving future by raising healthy, naturally nurtured bison in Hawaii through regenerative agriculture practices, revitalizing our land, enriching ecosystems, and nourishing vibrant communities with ethical, wholesome meat. As long-

time Hawaii residents we are keenly aware that 80% of Hawaii's food is imported, and Hawaii only holds a five-day supply of food. Hawaii food security is a real concern for us, and we intend to positively contribute to mitigating this challenge by ethically producing nutrient dense healthy bison protein in Hawaii for the local island communities. We would also like to give back to the community, once we have achieved a sustainable livestock production level, we intend to offer traditional Native Hawaiian field harvest events that mimic what we presently offer to Native American groups and schoolchildren. Please see link to a recent Field Harvest event we put on for over 100 Native American school kids. https://www.ktvh.com/news/montana-ag-network-students-experience-bison-harvest-and-blackfeet-traditional-ceremony

c. Biosecurity Measures for Aloha Bison Ranch

Equipment to Minimize Escape, Theft, or Release of Bison and Associated Diseases/Pests

- High-Strength Fencing:
  - Description: Pastures will be enclosed with PQB approved exterior fences, designed to contain bison, which are strong and capable of charging. Electric fencing (low-voltage, solar-powered) will be integrated in high-risk areas to deter escapes.
  - Purpose: Prevents bison from escaping confined grazing areas, reducing the risk of environmental damage or interaction with local wildlife.
  - Maintenance: Fences will be inspected weekly or more frequently for damage, with immediate repairs to maintain integrity.
- Secure Holding Pens:
  - Description: Heavy-duty steel corrals with reinforced gates are used for veterinary checks, loading, or temporary containment. Pens include water troughs to minimize stress.
  - Purpose: Ensures bison are securely contained during handling, reducing escape risk during transport or treatment.
- Disease Monitoring Tools:
  - Description: A Veterinarian will be scheduled to be on-site for routine health checks. We are presently experimenting with RFID tags, if these devices meet expectations we may install RFID tags on all bison. A mobile app (e.g., HerdDogg or similar livestock

tracking system) monitors bison health via RFID tags, alerting staff to signs of illness.

- Purpose: Early detection of diseases like bovine tuberculosis or brucellosis, which could spread to other livestock or wildlife, ensuring rapid isolation and treatment.

Practices and Procedures to Minimize Escape, Theft, or Release of Bison and Associated Diseases/Pests

- Rotational Grazing:
  - Procedure: Bison are moved between pastures using a rotational grazing system, guided by regenerative agriculture principles. Portable electric fencing divides pastures, and moves are planned to avoid overgrazing or fence stress.
  - Purpose: Reduces pressure on fencing, minimizing escape attempts, and promotes soil health, reducing pest habitats.
- Regular Health Monitoring:
  - Procedure: Bison are very hardy and may live full long lives without ever needing vaccines. Bison will be vaccinated against common diseases per USDA and Hawaii Department of Agriculture (DAB) guidelines. Sick animals are quarantined in isolated pens.
  - Purpose: Prevents disease spread within the herd or to local wildlife.
- Staff Training:
  - Procedure: All staff will undergo annual biosecurity training, covering proper handling, sanitation protocols, and emergency response for escapes or disease outbreaks. Training includes DAB's biosecurity guidelines for livestock.
  - Purpose: Ensures consistent application of biosecurity measures, reducing human error in containment or disease prevention.
- Visitor Control:
  - Procedure: Visitors, including suppliers or community members, must first check in at a gated entrance. No unauthorized access to bison pastures will be allowed.
  - Purpose: Minimizes external introduction of pathogens and reduces theft or vandalism risks.

- Transport Protocols:
  - Procedure: Bison are transported in heavy-duty livestock trailers with secure latches, cleaned and disinfected before and after use. Transport routes avoid populated areas to minimize escape risks in case of accidents.
  - Purpose: Ensures bison remain contained during movement to the slaughterhouse, preventing release into non-native environments.

Security Features to Minimize Theft, Vandalism, or Damage from Natural Elements

- Perimeter Security:
  - Description: The facility location is difficult to access from public areas, the property is surrounded by Corteva to the North which has security fencing and locked gates fronting Farrington Highway, this is the only public road access to the property. Private ranches are located to the east and west of the property and Mokuleia Forest Reserve is a roadless neighboring parcel to the south. Road access from Farrington Hwy requires passing through three sets of locked gates before arriving at the entry to the property. The ranch has existing barbed wire fence pastures and perimeter fences to further deter unauthorized entry. Motion-activated sim card enabled security cameras and solar-powered lighting will be installed at key access points. We will also have an aerial drone which will be used for perimeter fence checks and surveillance along the perimeter.
  - Purpose: Prevents theft of bison or equipment and discourages vandalism, such as fence cutting.
- Weather-Resilient Infrastructure:
  - Description: Pasture fencing will be anchored with deep-set posts and braces to withstand winds up to 150 mph. The property is naturally sloped from Mauka to Makai with drainage systems around pastures to prevent flooding during heavy rain.
  - Purpose: Maintains containment and operational integrity during natural events, reducing escape or damage risks.
- Alarm Systems:
  - Description: An alert message system is connected to the ranch manager’s phone and alerts staff to gate breaches or unusual activity detected by cameras. Local police will be on speed-dial for rapid response.

- Purpose: Enhances response time to potential theft or vandalism incidents.

Examples Demonstrating Biosecurity Effectiveness

- Big Sky Bison Ranch (our Montana Ranch):
  - Aloha Bison will be set up almost identical to how we have set up Big Sky Bison, our Montana regenerative bison ranch. Aloha Bison will adopt similar biosecurity protocols, ensuring comparable success and biosecurity control. Big Sky Bison controls all entry to the property via locked gates and secure perimeter fencing. Bison are rotated through pastures regularly to prevent stress which may lead to increased fence pressure. Our bison are vaccinated and vet checked once per year, and do not require any other human intervention. We use Tactacam solar powered sim card enabled security/herd movement cameras, these cameras send a real time color photograph to ranch staff anytime motion is detected. We also use an aerial drone for surveillance along our 14.5 miles of fence line. Ranch staff are required to complete daily fence checks in active pastures and weekly full perimeter fence checks. If a fence is damaged, which at Big Sky Bison is usually from deer or elk getting tangled in a fence when they try to jump over, the fence is repaired immediately.
  - Relevance: Demonstrates that regular monitoring and rotational grazing, as planned for Aloha Bison, effectively minimize biosecurity issues.

6. Alternatives:

We are bison experts and enthusiasts and are only interested in producing bison at Aloha Bison. We do not have alternatives for this operation; without bison this operation will not exist.

Plains Bison, *Bison bison*
Aloha Bison, LLC.

7. References:

- The Bison Producers Handbook – **First** Edition
    - National Bison Association Publication
- The Bison Producers Handbook – **Second** Edition
    - National Bison Association Publication
- The Bison Field Necropsy Guide
    - National Bison Association
- The Bison Disease Field Guide
    - National Bison Association
- The Insider's Guide to Bison Handling and Management
    - National Bison Association
- All of the above noted references are available by clicking this link: https://nationalbison.org/bison-store/

Plains Bison, *Bison bison*
Aloha Bison, LLC.

III. Proposed Import and Possession Permit Conditions

1. The restricted article(s), Plains Bison, *Bison bison*, including progeny, shall be imported and possessed for breeding and commercial meat production, purposes approved by the Board of Agriculture and Biosecurity (Board), and shall not be given, sold, and/or transferred in Hawaii unless approved by the Board. Release of the restricted article(s) into the environment is prohibited.

2. The permittee, Michael J. Botha, Aloha Bison, LLC., 59-426 Kawowo Place, Haleiwa, Hawaii 96712, shall be responsible and accountable for the restricted article(s), including progeny, from the time of their arrival to their final disposition.

3. The restricted article(s) shall be safeguarded at Aloha Bison, LLC., 67-150 Farrington Highway, Waialua, Hawai'i 96791, Tax Map Keys (TMKs): (1) 6-7-002:040 and (1) 6-7-002:043, site(s) inspected and approved by the Hawaii Department of Agriculture and Biosecurity (DAB) Plant Quarantine Branch (PQB) prior to importation. A site inspection and approval by the PQB Chief is required prior to the import or transport of the restricted article(s) to another site.

4. The restricted article(s) shall be maintained by the permittee, Michael J. Botha, Aloha Bison, LLC., 59-426 Kawowo Place, Haleiwa, Hawaii 96712 or by trained or certified personnel designated by the permittee.

5. The restricted article(s) shall be imported only through the port of Honolulu, as approved by the Board. Entry into Hawaii through another port is prohibited unless specified by the Board.

6. The permittee shall provide the DAB PQB and Animal Industry Division (AID) with the confirmed arrival date, time, mode of transportation, and any other required information for the arrival of the restricted article(s) at least 48 hours prior to arrival. The permittee shall immediately notify the PQB and AID of any changes to this information.

7. Each shipment of the restricted article(s) shall be accompanied by the following:
   a. A complete copy of the PQB permit for the restricted article(s);
   b. An invoice, packing list, or other similar PQB approved document listing the scientific and common names of the restricted article(s);
   c. The quantity of the restricted article(s); and
   d. Shipper contact information, including mailing address, phone number and email address.

8. The restricted article(s) shall be permanently marked with a unique identification code, or other markings or identifiers as approved by the PQB Chief.

9. Each container holding the restricted article(s) imported into the state shall be clearly labeled with “Live Animals” and “May be Opened and Delayed for Agriculture Inspection” in 1/2-inch minimum sized font.

10. All bedding used to transport the restricted article(s) and fecal material from the restricted article(s) shall be bagged and disposed of directly into the municipal landfill.

11. The restricted article(s) shall comply with all pre-entry and post-entry animal heath requirements of the AID, pursuant to Chapter 4-16, Hawaii Administrative Rules, or as required by the DAB State Veterinarian (Ph: (808) 837-8092).

12. The restricted article(s) shall be kept secured by PQB-approved exterior fences and gates at all times. The following requirements apply to all fencing and gates used to secure the restricted article(s):

    a. The approved fence(s) and gate(s) shall be a minimum of 5.5 feet in height and shall be made of woven wire, chain link fence, 4-point barbed wire, or other PQB-approved material. A combination of the aforementioned materials may be used.

    b. All barbed wire used shall be a minimum of 12.5 gauge, and the space between horizontal wires shall not exceed 8 inches. If fencing consists of only barbed wire, the distance between line posts shall not exceed 10 feet.

    c. All woven wire used shall be a minimum of 9 gauge. If fencing consists of only woven wire, the space between all horizontal wires shall not exceed 10 inches, the space between vertical wires shall not exceed 12 inches, and the distance between line posts shall not exceed 16 feet.

    d. The lowest horizontal barbed wire and/or woven wire shall not be greater than 6 inches off the ground. The lowest point on a vertical barbed wire, woven wire and/or chain link fence shall not be greater than 6 inches off the ground. Line posts shall be a minimum of 7-inch diameter wooden posts, metal T-posts, or other comparable PQB approved material.

    e. For other fencing or containment options that are not already specified in Condition No. 12, the Board may approve alternative fencing options on a case-by-case basis.

13. The restricted article(s) shall be subject to inspection by the DAB PQB, and the AID prior to entry into the State. It is the responsibility of the permittee to provide any restraint(s), including chemical restraint(s), deemed necessary by the AID to

conduct a proper inspection. The permittee shall be responsible for ensuring an inspection is conducted by PQB and the AID.

14. The approved site, restricted article(s), records, and documents pertaining to the restricted article(s) and progeny under this permit, shall be subject to post-entry inspections by PQB and the AID. The permittee shall make the site, restricted article(s), including progeny, and records pertaining to the restricted article(s) available for inspection upon request by a PQB or the AID inspector.

15. The permittee shall adhere to the use, facility, equipment, procedures, and safeguards described in the permit application and as approved by the Board.

16. The permittee shall have a biosecurity manual available for review and approval by the PQB at the time of the initial site inspection and any subsequent post-entry inspection(s), which identifies the practices and procedures to be adhered to by the permittee to minimize or eliminate the risk of theft, escape, or accidental release of the restricted article(s), including the risk of introduction and spread of diseases and pests associated with the restricted article(s) to the environment. The permittee shall adhere to all practices and procedures as stated in this biosecurity manual.

17. The permittee shall immediately notify the PQB Chief verbally and in writing under the following circumstances:

    a. If any escape, theft, release, disease outbreaks, pest emergence and/or mortality involving the restricted article(s) or progeny under this permit occurs. If the restricted article(s) or progeny escape or are found to be free from containment, the DAB may confiscate or capture the restricted article(s) or progeny at the expense of the permittee, pursuant to the Hawaii Revised Statutes (HRS), §150A-7(c). The AID shall also be notified of any sign or occurrence of disease.

    b. If any changes to the approved site, facility, and/or procedures regarding the restricted article(s) or progeny occur or are to be made, the permittee shall obtain written approval from the PQB Chief as soon as practicable (if unplanned) or prior to implementation (if planned). The permittee shall also submit a written report documenting the specific changes to the PQB Chief.

    c. If a shipment of the restricted article(s) is delivered to the permittee without a PQB “Passed” stamp, tag or label affixed to the article, container, or delivery order that indicates that the shipment has passed inspection and is allowed entry into the State, then the permittee shall not open or tamper with the shipment and shall secure, as evidence, all restricted article(s), shipping container(s), shipping document(s) and

packing material(s) for PQB inspection.

d. If the permittee will no longer import or possess the restricted article(s) or progeny authorized under this permit, then the permittee shall submit a written report to the PQB Chief stating the name and address of the individual to whom the restricted article(s) will be transferred to. If the restricted article(s) and/or progeny will be transferred within the State, a PQB possession permit shall be obtained by the new owner and a site inspection conducted by the PQB shall be completed prior to transfer. Once the transfer is complete, this permit shall be cancelled or amended as appropriate.

e. If the restricted article(s) and subsequent progeny reproduce, the permittee shall submit a written report to the PQB Chief indicating the number of offspring and any other information deemed necessary by the PQB Chief.

f. If the restricted article(s) or progeny expires, the permittee shall submit a written report to the PQB Chief that details the circumstances surrounding the death of the restricted article(s) or progeny, the cause of death of the restricted article(s) or progeny, and any other information deemed necessary by the PQB Chief. The permittee shall also submit a necropsy report from a U.S. Department of Agriculture accredited veterinarian within thirty (30) days post-mortem. This condition shall not apply to restricted article(s) or progeny that are used for meat production.

18. The permittee shall submit a copy of all valid licenses, permits, certificates or other similar documents required by other agencies for the restricted article(s) to the PQB Chief. The permittee shall immediately notify the PQB Chief in writing when any of the required documents are suspended, revoked, or terminated. This permit may be amended, suspended, or canceled by the PQB Chief upon suspension, revocation, or termination of any license, permit, certificate, or similar documents required for the restricted article(s).

19. The permittee shall comply with all applicable requirements of municipal, state, or federal law pertaining to the restricted article(s) and progeny.

20. The permittee shall submit a semi-annual report to the PQB Chief in January and July of all restricted articles(s) and progeny imported or possessed. The report shall be in a format approved by the PQB Chief and include the following information for the prior 6-month period:

a. The permit number, quantity, scientific name of each restricted article(s) and progeny;

b. The status of the use and possession of the restricted article(s) and progeny;

c. A summary of any significant changes to the permittee's operation, personnel, and/or procedures; and

d. Any significant events that occurred at the permittee's site.

21. Any violation of the permit conditions may result in citation, permit cancelation, and enforcement of any or all of the penalties set forth in HRS §150A-14.

22. The permittee is responsible for costs, charges, or expenses incident to the inspection, treatment, or destruction of the restricted article(s), including progeny, as provided in Act 173, Session Laws of Hawaii 2010, Section 13, including, if applicable, charges for overtime wages, fixed charges for personnel services, and meals.

23. A canceled permit is invalid and upon written notification from the PQB Chief, all restricted article(s) listed on the permit shall not be imported. In the event of permit cancelation, any restricted article(s) imported or possessed under this permit, including progeny, may be moved, seized, treated, quarantined, destroyed, or sent out of State at the discretion of the PQB Chief. Any expense or loss in connection therewith shall be borne by the permittee.

24. The permit conditions are subject to cancelation or amendment at any time due to changes in statute or administrative rules restricting or disallowing import or possession of the restricted article(s) or due to Board action disallowing a previously permitted use of the restricted article(s).

25. These permit conditions are subject to amendment by the PQB Chief in the following circumstances:

a. To require disease screening, quarantine measures, and/or to place restrictions on the intrastate movement of the restricted article(s), as appropriate, based on scientifically validated risks associated with the restricted article(s), as determined by the PQB Chief, to prevent the introduction or spread of disease(s) and/or pests associated with the restricted article(s).

b. To conform to updated Board approved permit conditions for the restricted article(s), as necessary to address scientifically validated risks associated with the restricted article(s).

26. The permittee shall defend and indemnify the State of Hawaii, its officers, agents, employees and the Board of Agriculture and Biosecurity members for any and all

claims against the State of Hawaii, its officers, agents, employees or Board of Agriculture and Biosecurity members that may arise from or be attributable to any of the restricted article(s) that are introduced under this permit. This permit condition shall not apply to a permittee that is a federal or State of Hawaii entity or employee, provided that the state or federal employee is a permittee in the employee's official capacity.

Plains Bison, *Bison bison*
Aloha Bison, LLC.

IV. Advisory Subcommittee Review

This request was submitted to the Advisory Subcommittee on Land Vertebrates for their review and recommendations. Their recommendations and comments are as follows:

1. I recommend approval ___ / ___ disapproval to allow the importation and possession of twenty-seven (27) Plains Bison, *Bison bison*, an animal on the List of Restricted Animals (Part B), by permit, for breeding and commercial meat production, by Aloha Bison, LLC.

Dr. Allen Allison, Vice President/Assistant Director, Research and Scholarly Studies, Bernice Pauahi Bishop Museum: Recommends approval.

> Comments: "As mentioned in the application, Bison nest phylogenetically within the genus Bos and in that sense are simply another species of cattle. Without actually seeing the areas where they will be kept, it is difficult to assess their potential impact on the environment. However, I am assuming that they will be kept on range land that has been designated for cattle. Pastures in Hawaii have few if any native species of plants or animals, so the potential for adverse environmental impacts is low. The claim that Bison will assist in ecological restoration is laughable. The pasture grasses in Hawaii are almost all introduced and ecological restoration in Hawaii requires an absence of large ungulates. However, if Bison husbandry otherwise adds to Hawaii's food security, that's a good thing. This is basically a request to import another species of cattle and from an environmental point of view I don't see a problem with that."

Dr. Isaac Maeda, DVM, State Veterinarian, DAB-Animal Industry Division: Recommends approval.

Dr. Carolyn McKinnie, DVM: Recommends approval.

> Comments: "Reasons for approval:
> 1) Existing bison herd in Kauai
> 2) Regenerative farming
> 3) Pasture rotation to improve (Soil health, prevent overgrazing)
> 4) Ethical husbandry practices
> 5) Pastures monitored daily for fence integrity and weekly for environmental conditions.
> 6) Monthly vet inspections and RFID health metric monitoring (e.g., temperature, weight loss)
> 7) Diet free from antibiotics and hormones (growing health concern)
> 8) Disposal sites are monitored to ensure no runoff reaches nearby bodies of water"

Plains Bison, *Bison bison*
Aloha Bison, LLC.

Dr. Robert Reed, Director of the United States Geological Survey, Pacific Island Ecosystems Research Center, Hawaii Volcanoes National Park: Recommends approval.

> Comments: "Adherence to the existing requirements for importation of bison and water buffalo should be sufficient to avoid introduction of significant pathogens; the primary gap in that document is absence of a requirement to treat bison for internal parasites. I am concerned about introduction of non-native noxious plants via zoochorous seeds carried in the bison coats, and would prefer that they be visually screened for seeds.
>
> The statements about bison promoting biodiversity, revitalizing the land, enriching ecosystems, etc in Hawaii are without merit and should not be considered in the application review process. These are nonnative animals that will be pastured on non-native grasses, most of which are invasive and which contribute to loss of native plant diversity."

Dr. Robert Thomson, Professor, School of Life Sciences, University of Hawaii at Manoa: Recommends approval.

> Comments: "Request is framed as representing a 'significant step toward creating a sustainable and holistic agricultural model in Hawaii'. The potential for this is likely minimal, as large ungulate grazing operations of this sort are not representative of historical Hawaiian ecosystems and sustainability of large ungulate meat production at a meaningful scale for feeding Hawaii's populations is questionable. This may add a new element to local food production that could potentially contribute in a way that is similar to cattle production elsewhere in the state. That said, significant negative impacts are also unlikely to exceed those of cattle grazing operations elsewhere in the state: the potential for invasiveness appears to be minimal and there are few disease risks beyond those posed by cattle grazing. Pending PQB site visit to ensure secure facilities capable of holding Bison, I recommend approval."

Dr. Amber Wright, Associate Professor, School of Life Sciences, University of Hawaii at Manoa: Recommends disapproval.

> Comments: "I do not support introducing bison to Hawaii. They have no connection to this place, and are not native to tropical or island environments, being a temperate grassland species. The argument that they will not become invasive because they are a herd animal is not compelling, as we have several highly invasive ungulates here that live in herds such as mouflon sheep and axis deer."

Plains Bison, *Bison bison*
Aloha Bison, LLC.

2. I recommend approval ___ / ___ disapproval to update permit conditions for the importation and possession of twenty-seven (27) Plains Bison, *Bison bison*, an animal on the List of Restricted Animals (Part B), by permit, for breeding and commercial meat production, by Aloha Bison, LLC.

Dr. Allen Allison: Recommends approval.

Comments: "I have no experience with ranching but trust the experts at HDOA to ensure that pastures are secure, etc."

Dr. Isaac Maeda: Recommends approval.

Comments: "Permittee will need adequate corral/chute for exam and testing of animals when required."

Dr. Carolyn McKinnie: Recommends approval.

Comments: "Although I recommend approval, I recommend Aloha Bison, LLC address the following:
1) Local/native animal displacement
2) Effects of tropical environment on temperate animals. For example, extreme humidity and effects on their skin (rain rot) and coat, exposure to parasites not found in Montana, etc.
3) Bison herd in Kauai recently moved to drier side of island. Bison may have had issues from being exposed to more moisture and rain
4) Proximity to traditional cattle herds in relation to disease transmission and applicant mentions Bison may exhibit aggressive behavior towards other bovines such as cattle
5) Access to a variety of plants/shrubs that would fill the need to shift to higher protein sources at certain times of years (applicant mentions they change food forage preferences in Montana)"
6) What SOP's will be in place to train the workers as bison require specialized handling"

Dr. Robert Reed: Recommends approval.

Dr. Robert Thomson: Recommends approval.

Dr. Amber Wright: Recommends disapproval.

ADVISORY COMMITTEE REVIEW: We request your recommendation and comments at the next meeting of the Advisory Committee on Plants and Animals.

Appendix A

PQ-7 (01/04)

State of Hawaii
Department of Agriculture
PLANT QUARANTINE BRANCH
1849 Auiki Street, Honolulu, HI 96819-3100
Phone: (808) 832-0566, FAX: (808) 832-0584

For Office Use Only

Fee: $_____ Receipt No. _____

☐ Approve Permit No._____ Date: _____
☐ Disapprove ☐Other _____

Processed by: _____ Date: _____

PERMIT APPLICATION FOR RESTRICTED COMMODITIES INTO HAWAII

Date: *05/20/25*

In accordance with the provision of Chapter 71 , Hawaii Administrative Rules of the Division of Plant Industry, Department of Agriculture, a permit is requested for the following commodities:

Please type or print clearly.

Quantity	Commodity	Scientific Name
22	Bison Heifers	Bison bison
5	Bison Bulls	Bison bison

Name and address of shipper: Michael J Botha, Big Sky Bison LLC, 234 Vaughn N. Frontage Rd. Vaughn MT 59487 808-4781479
mjbotha@bigskyps.com www.bigskybison.com

(Mainland or Foreign address)

Approximate date of arrival: 01/15/2026

Mode of Shipment: ☐ Mail ☑ Air Freight ☐ Boat

Type of Permit:
- --- Import
  - ☐ one time only ☑ multi-shipments
- --- Intrastate shipment
  - ☐ one time only ☐ multi-shipments
- ☐ Possession

Object of importation:
- ☑ Kept caged at all time
- ☐ Used for propagation
- ☐ Imported for exhibition
- ☐ Imported for liberation
- ☐ Other purposes - specify _____

Please type or print clearly.

Applicant's Name Michael J Botha

Company Name Aloha Bison LLC
(if applicable)

Hawaii Mailing Address 59-426 Kawowo Place, Haleiwa, HI 96712

Telephone number 808 478 1479

Facsimile number _____

Fee Amount Enclosed (cash, check or mail order) $_____

(complete reverse side)

Appendix A

PLEASE COMPLETE THE FOLLOWING INFORMATION (attach extra sheet if necessary)

1. State in detail the reasons for introduction (include use or purpose).

The purpose of introduction is to start a bison production operation on the North Shore of Oahu. The long-term purpose is to provide grass fed bison meat and bison products for local harvest and consumption. An additional long-term purpose is to provide public education on the use of bison as a tool for regenerative agriculture.

2. Person responsible for the organism (include name, address and phone number).

Michael J Botha and Aloha Bison LLC will be responsible and accountable for the safeguarding and use of the bison.
Mail address is 59-426 Kawowo Pl, Haleiwa, HI 96712 Phone 808 4781479
We intend to register Aloha Bison LLC as a new Hawaii LLC that will own and operate this business.

3. Location(s) where the organism will be kept and used (include address, contact and phone number).

a. Bison will be confined at G Tree Ranch located Tax Map Keys (TMK's) for the ranch are 6-7-2-40 and 6-7-2-43. The physical address is 67-150 Farrington Hwy, Waialua, Hi 96791, there is no mail delivery and no mailbox associated with the address. The driveway entry location, which is shared with Corteva (formerly Pioneer), is 67-172 Farrington Hwy, Waialua, HI 96791.
b. Bison will be contained within a purpose-built fenced pasture enclosure, designed and built according to Plant Quarantine Branch approved design, materials and construction protocols. Please see Attachment A for details.

4. Method of disposition.

a. Bison will be harvested for local meat consumption once they attain their targeted liveweight. Bison may be field harvested on property, or transported via enclosed stock trailer to Hawaii Meats, a local USDA Slaughter and processing facility nearby.
Please see Attachment A for additional details.

5. Give an abstract of the organism with particular reference to potential impact on the environment of Hawaii (include impact to plants, animals and humans).

Please see Attachment A for in depth details.

****

I request permission to import the articles as listed on the permit application and further, request that the articles be examined by an authorized agent of the Department of Agriculture upon arrival in Hawaii.

I agree that I, as the importer, will be responsible for all costs, charges or expenses incident to the inspection or treatment of the imported articles.

I further agree that damages or losses incident to the inspection or the fumigation, disinfection, quarantine, or destruction of the articles, by an authorized agent of the Department of Agriculture, shall not be the basis of a claim against the department or the inspectors for the damage or loss incurred.

Signature Michael J Botha **Date** 5/20/25

(Applicant)

Attachment A: PQ-7 additional details:

1. **Reasons for Introduction**
   The purpose of introduction is to start a bison production operation on the North Shore of Oahu. The long-term purpose is to provide grass fed bison meat and bison products for local harvest and consumption. An additional long-term purpose is to provide public education on the use of bison as a tool for regenerative agriculture.

2. **Person responsible for Bison**
   Michael J Botha will be responsible and accountable for the safeguarding and use of the bison.
   Michael J Botha mail address is 59-426 Kawowo Pl, Haleiwa, HI 96712
   Phone 808 4781479
   We intend to register Aloha Bison LLC as a new Hawaii LLC that will own and operate this business.

3. **Locations Where Bison will be kept and used**
   a. Bison will be confined at G Tree Ranch located Tax Map Keys (TMK's) for the ranch are 6-7-2-40 and 6-7-2-43. The physical address is 67-150 Farrington Hwy, Waialua, Hi 96791, there is no mail delivery, and no mailbox associated with the address. The driveway entry location, which is shared with Corteva (formerly Pioneer), is 67-172 Farrington Hwy, Waialua, HI 96791.
   b. Bison will be contained within a purpose-built fenced pasture enclosure, designed and built according to Plant Quarantine Branch approved design, materials and construction protocols.
   c. There are multiple layers of security and locked gates that need to be navigated before gaining access to the fenced bison containment area. The first step in gaining access to the property is through a shared driveway with Corteva. This driveway has two sets of locked gates located at 67-172 Farrington Hwy, Waialua, HI 96791 that must first be accessed before gaining access to the third locked gates and driveway leading into G Tree Ranch. Upon access to G Tree Ranch, a private road leads to the fenced and locked gates for the bison containment pasture. Additional security measures include: hidden solar powered real time motion activated security cameras positioned throughout the property, roaming security guard patrols, manually activated aerial drone security surveillance.
   d. We practice humane low stress stockmanship with our bison. Onsight management will ensure that bison are secured, maintained humanely and have free access to grass pasture and water.

4. **Method of Disposition**
   a. Bison will be harvested for local meat consumption once they attain their targeted liveweight. Bison may be field harvested on property, or transported via enclosed stock trailer to Hawaii Meats, a local USDA Slaughter and processing facility nearby.
   b. Bison are herd animals with a very strong herding instinct. Bison do not like to be separated from their herd mates and will attempt to rejoin their herd whenever they become seperated. In the unlikely event that bison become separated from the herd

and/or escape their enclosure, the first step will be to attempt to lead them back to their herd using non-lethal stockmanship strategies. If the bison do not comply with the attempts to return them to their enclosure, they will be humanely euthanized with a precision rifle shot to the axis bone (top segment of their vertebrae). Using a single 180 grain .308 cartridge or similar will render the bison dead upon bullet impact.

c. If bison were somehow able to become established in the wild they will be easy to track, find and eradicate. Bison are massive herd animals; they usually stick together in tight herd structures and prefer to graze in open grassy areas. Bison need to drink up to twelve gallons of water per day, so they will need to travel to watering sites daily. Once bison have been tracked down, they can be easily killed with a precision rifle shot to the axis bone (neck) or a broadside shot to the vital organs including heart and lungs.

5. Abstract of Organism and potential impact on the environment

a. A **bison** (pl.: **bison**) is a large bovine in the genus ***Bison*** (Greek: "wild ox" (bison)[1]) within the tribe Bovini. Of the two surviving species, the American bison, *B. bison*, found only in North America, is the more numerous. The North American species is composed of two subspecies, the Plains bison, *B. b. bison*, and the generally more northern wood bison, *B. b. athabascae*. Bison species have been traditionally classified in their own genus, modern genetics indicates that they are nested within the genus *Bos*, which includes, among others, cattle, yaks and gaur, being most closely related to yaks. We will be importing Plains bison from Montana.

b. The American bison are the largest surviving terrestrial animals in North America. They are typical artiodactyl (cloven hooved) ungulates and are similar in appearance to other bovines such as cattle and true buffalo. They are broad and muscular with shaggy coats of long hair. Adults grow up to 2 meters (6 feet 7 inches) in height and 3.5 m (11 ft 6 in) in length for American bison. American bison can weigh from around 400 to 1,270 kilograms (880 to 2,800 pounds). Bison are nomadic grazers and travel in herds. Towards the end of the summer, for the reproductive season, the sexes necessarily commingle. Bison may live to 20 years of age.
Female bison ("cows") typically reproduce after three years of age and can continue beyond 19 years of age. Cows produce calves annually as long as their nutrition is sufficient, but not after years when weight gain is low. Reproduction is dependent on a cow's mass and age. Heavier cows produce heavier calves (weighed in the fall at weaning), and weights of calves are lower for older cows.

c. Bison are ruminants, able to ferment cellulose in a specialized stomach prior to digestion. Bison consume grasses and sedges, and a wide variety of plants including woody plants and herbaceous eudicots. Over the course of the year, bison shift which plants they select in their diet based on which plants have the highest protein or energy concentrations at a given time and will reliably consume the same species of plants across years.

d. American bison once roamed the entire continent of America from high elevation mountain areas to sea level and coastal areas. Today bison are confined to a number of National and State Parks and private land throughout most states in the USA. Typical habitats are open or semi open grasslands, as well as sagebrush, semiarid lands, and

scrublands and forest. Some heavily wooded areas are also known historically to have supported bison. Bison also graze in hilly or mountainous areas where the slopes are surprisingly steep.

e. Bison are highly adaptable and can live in a wide range of climates, from extreme heat to extreme cold. Their thick coats and efficient digestive systems allow them to thrive in varying temperatures. In warmer climates bison do not grow thick winter fur as they do in colder climates. We have observed our own Big Sky Bison herd located in Central Montana flourish in extreme temperatures ranging from -55 degrees Fahrenheit during harsh winter conditions to +102 degrees Fahrenheit during extreme hot drought conditions in summer.
f. The bison diet is made up of mainly grasses. Bison also eat some other plant vegetation when grass sources are limited. It is estimated one bison needs around 8-12 gallons of water each day.
g. All precautions recommended by the Plant Quarantine Branch and Animal Disease Control Branch pertaining to bison shall be followed and adhered to prior to, and post importation to Hawaii.
h. All recommendations from Plant Quarantine Branch and Animal Disease Control Branch to prevent the introduction of contaminants to Hawaii, both pre and post entry shall be followed.

6. Other documented information that supports and justifies the request

a. Bison are not considered a pest or nuisance in their native range, or where they have become established. There is growing interest throughout most states in the USA in raising bison for commercial meat consumption.
b. Potential impacts of introducing bison
    i. Environmental impact - Bison will be confined to their fenced areas where they will be selectively rotated though pastures as part of a regenerative grazing process. Bison hoof action improves water retention of the soil. Urination and defecation introduce nutrients to soils that improve the soil profile. Bison will drink water from water troughs supplied by a water well already in operation on the property. Bison do not make much sound, aside from low volume grunts as they communicate within their herd. Bison do not moo or make other loud sounds often observed around cattle.
    ii. Economic impact – Bison will be raised and produced for local meat consumption in Hawaii. Our average 1,000 lbs. meat bison at our ranch in Montana generates $6,120 in meat sales revenue. We anticipate a similar pricing strategy for Hawaii, which equals a meat value of approximately $17.00 per 1 lbs. of boneless cuts of meat. A typical 1,000 lbs. live bison produces 36% of its live weight in boneless cuts of meat; therefore 1,000 lbs. x 36%=360 lbs. of boneless cuts of meat x $17.oo per 1 lbs. = $6,120 potential meat sales per bison. We will market our locally produced bison meat products direct to consumer and to leading local restaurants, health food stores and grocery stores. Hawaii Meats has agreed to charge approximately $1,100 to slaughter and process a single meat bison under USDA inspection. We intend to hire local

employees to work in the bison enterprise as well as a potential bison agritourism enterprise. We would like to follow the successful model for agritourism that we presently employ at Big Sky Bison, www.bigskybison.com our bison ranch in Montana. We intend offering a daily visitor program that will include guided bison field tours, educational tours and events, bison burger food truck, and possibly farm store meat sales.

iii. Societal impact – Aloha Bison's mission is to inspire a thriving future by raising healthy, naturally nurtured bison in Hawaii through regenerative agriculture practices, revitalizing our land, enriching ecosystems, and nourishing vibrant communities with ethical, wholesome meat. As long-time Hawaii residents we are keenly aware that 80% of Hawaii's food is imported, and Hawaii only holds a five-day supply of food. Hawaii food security is a real concern, and we intend to positively contribute to mitigating this challenge by ethically producing nutrient dense healthy bison protein for the local market. We would also like to give back to the community, once we have achieved a sustainable livestock production level, we intend to offer traditional Native Hawaiian field harvest events that mimic what we presently offer to Native American groups and schoolchildren. Please see link to a recent Field Harvest event we put on for over 100 Native American school kids. https://www.ktvh.com/news/montana-ag-network-students-experience-bison-harvest-and-blackfeet-traditional-ceremony

iv.

c. Potential impact of pathogens, parasites that may accompany this introduction? - We intend to address this by following all precautions recommended by the Plant Quarantine Branch and Animal Disease Control Branch pertaining to bison shall be followed and adhered to prior to, and post importation to Hawaii.

d. There is not a high degree of potential for bison to become established in Hawaii should an animal escape. As mentioned above (4. A, B, C) if bison escape, they are easily eradicated by targeted elimination or hunting. Bison are massive animals that are easily to find, prefer to stay in herds, prefer to graze in open grass areas and need to drink water every day. Considering the above, an escaped bison will be easy to find and eradicate. Another thing to consider is that to become established; it would require that both bull and heifer bison escape and elope together, in order to breed. Cow bison can have only one calf per year.

e. As of 5/20/25 we have not applied for or received other permits. We intend to follow all HDOA guidelines for applying for all necessary permits.

f. This application was completed by Michael J Botha, owner of Big Sky Bison LLC based out of Big Sky, MT. We started a bison operation on leased property in Montana in 2018, and moved to our own Big Sky Bison ranch in 2020. Big Sky Bison is a working bison ranch producing ethically raised top quality bison in Montana. Big Sky Bison raises and sells live bison, we produce USDA Certified bison meat products for the retail and commercial market, we sell meat direct to consumer online and from our ranch store. Big Sky Bison Ranch operates a growing visitor program including: daily bison tours, photography tours, field harvest educational events, bison hunting opportunities

(Buffalo Hunt Montana is the name of our hunting and outfitting enterprise), overnight RV stays, Airbnb stays at a renovated historic schoolhouse on the ranch, we are active members of the National Bison Association and Montana Bison Association.

Links to our website and social media pages and helpful industry links are below:

Big Sky Bison Website: www.bigskybison.com

Big Sky Bison Online Store: https://app.barn2door.com/QOdzM

Facebook Big Sky Bison: https://www.facebook.com/grassfedbison/

Instagram Big Sky Bison: https://www.instagram.com/bigskybisonmt/

Facebook Buffalo Hunt Montana: https://www.facebook.com/profile.php?id=100087745860116

Instagram Buffalo Hunt Montana: https://www.instagram.com/buffalohuntmt/

National Bison Association: https://nationalbison.org/

Montana Bison Association: https://www.montanabison.org/

MICHAEL J. BOTHA

ENTREPRENEUR/INVESTOR

OBJECTIVE

Create, grow, and manage a successful income producing real estate and business investment portfolio in the USA.

SKILLS & ABILITIES

I have a broad range of business experiences, networking and public speaking. I am a highly energetic strong leader, and a goal driven person who welcomes new challenges.

LOCATED

P.O.Box 161900

Big Sky, MT 59716

M 808 478 1479

W 406 539 7020

E mjbotha@bigskyps.com

www.wapitiventures.com

EXPERIENCE

EQUITY PROPERTIES, LLC, BIG SKY, MT

NOV 2017 - PRESENT

Operations Manager, Property Management Company professionally managing a portfolio of single family, multi family, mixed use, retail, storage, RV and Mobile Home Communities

WAPITI VENTURES, LLC, JACKSON, WY

DEC 2016 - PRESENT

CEO, Holdings Company for various real estate and business entities throughout USA

BIG SKY BISON, LLC, BIG SKY, MT

NOV 2018 - PRESENT

Operations Manager, Top Quality Cow/Calf Bison Ranching and Bison Meat Products Company based out of MT

YELLOWSTONE HOLDINGS, LLC, BIG SKY, MT

DEC 2016 - PRESENT

CEO, Residential Real Estate Investment Company with holdings in Big Sky, MT

LONE PEAK ENTERPRISES, LLC, BIG SKY, MT

DEC 2016 - PRESENT

CEO, Commercial Real Estate Investment Company with holdings in Big Sky, MT

BOTHA PROPERTIES, LLC, HALEIWA, HI

DEC 2004 - PRESENT

CEO, Residential Real Estate Investment Company with holdings in Hawaii

SANDWICH ISLE PEST SOLUTIONS, INC, PEARL CITY, HI

JAN 1997 – SEPT 2016

Founder, Associate Certified Entomologist and President of Hawaii's leading pest, termite and wildlife management company, serving all of Hawaii and Midway Atoll

TERMINIX INTERNATIONAL, CA AND HI

JAN 1990 – DEC 1996

Trainee Manager in Laguna Hills, California and Technical Specialist for Hawaii Region

MICHAEL J. BOTHA
ENTREPRENEUR/INVESTOR

EDUCATION

BROWARD COMMUNITY COLLEGE, FORT LAUDERDALE, FL, PEST CONTROL TECHNOLOGY
4.0 GPA, graduated

LEADERSHIP

Jack Creek Preserve Foundation, March 2017 – September 2018
Member Board of Directors and Executive Committee

2016 Crown Leadership Award Recipient, 2016 sponsored by PCT/Syngenta

NPMA Fumigation Division, July 2015- July 2017 - Chairman of Board

QualityPro July 2016 -July 2017– Member Board of Directors

Hawaii Dept of Agriculture Advisory Board, June 2015 -2018
Member Board of Directors

Hawaii Pest Control Board - Department of Commerce and Consumer Affairs - Board Member and Chairman of Board 1998 - 2004 · 6 yrs

State of Hawaii Regulated Industries Complaints Office, Jan 2014-2018 Advisory Committee Member

NPMA 2014-2016 Member Board of Directors

HPCA 1997-2010 Member Board of Directors

MEMBERSHIP AND PARTICIPATION

National Pest Management Association

National Bison Association

Montana Bison Association

Dakota Territory Bison Association

Log Home Builders Association – Certified Log Home Builder

Hawaii Pest Control Association

MICHAEL J. BOTHA
ENTREPRENEUR/INVESTOR

SCI – Great Falls Chapter

Dallas Safari Club

National Rifle Association

Rocky Mountain Elk Foundation

Wild Sheep Foundation

PERSONAL INTERESTS

Family man married to Melissa with two children

Passionate about learning and self-improvement

Active outdoorsman, enjoy hunting, fishing, fitness and water sports

PROFESSIONAL INTERESTS

Interested in providing quality products and services that are in harmony with the natural world.

Enjoy seeking and engaging in new business ventures that have potential to provide conservative profit and growth in both strong and weak economies.

Driven to build a successful income-generating business investment portfolio.

REFERENCES

CHUCK TINDOL, PRESIDENT NPMA
678 614 2418

LAURA VUKASIN, PRESIDENT PRAIRIE MT BANK
406 268 0404

CHRIS MC CLOUD, INVESTOR/RETIRED
847 612 0760

TIM R. KENT, PRESIDENT FIRST SECURITY BANK
406 556 3215

Audubon Conservation Ranching Program

Certificate of Compliance

Certified Party:

Big Sky Bison

224 Vaughn North Frontage Road, Vaughn, MT 59487

GRAZED ON AUDUBON CERTIFIED BIRD FRIENDLY LAND

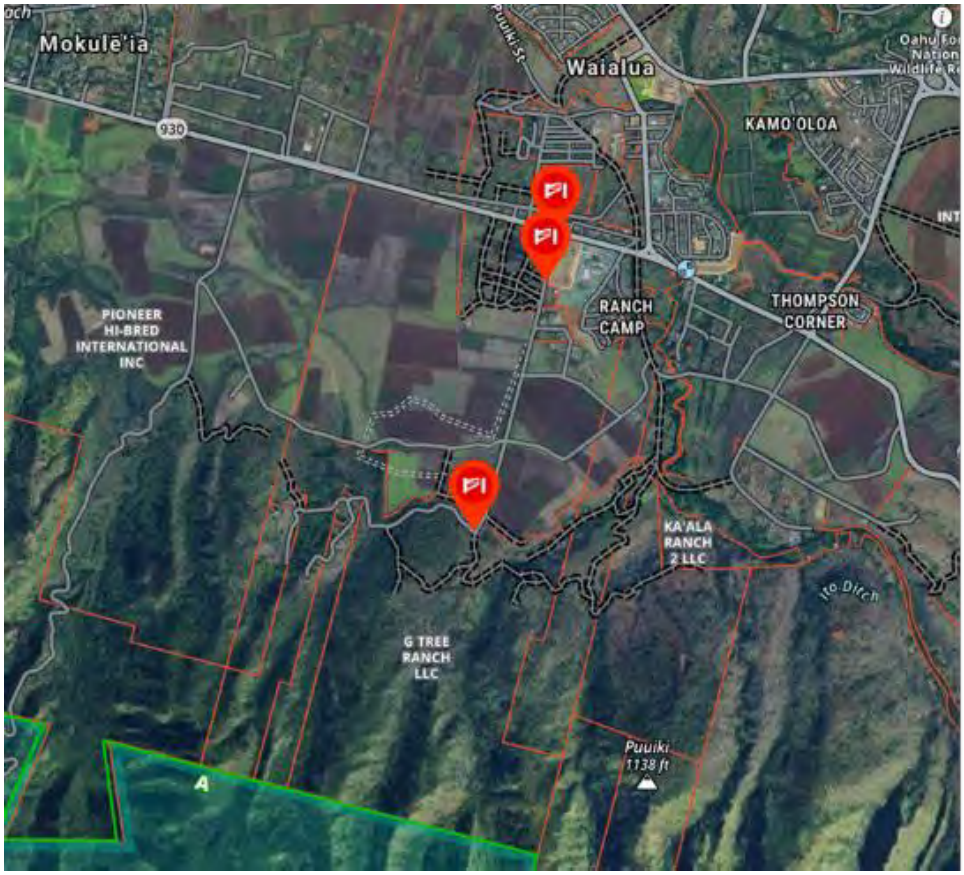
Certified Livestock: Bison
CCID#: 05552-2025
Effective From: 07/11/2025
Certification Body:
Food Alliance, Fletcher, NC

The "Grazed on Audubon Certified Bird Friendly Land" certification seal distinguishes farms and ranches committed to raising livestock in a manner that enhances habitat for focal bird species and other wildlife, conforms to forage consumption protocols that allow cattle to graze on open pastures, adheres to the compassionate treatment of animals, and ensures environmental sustainability that results in cleaner streams, healthier soils, and functional ecosystems.

The Certified Party is authorized to label meat products produced from certified livestock using the Audubon Certified seal, as displayed above. Questions regarding the verification of this certificate should be directed to Food Alliance at certification@foodalliance.org, or 425-466-7168. Certificate effective until surrendered, suspended, or revoked according to Audubon Certification Protocols and Policies.

This certificate is not transferable to another party. Version Date of Certificate: 07/21/2025

Map and Directions:



Directions

Get on I-H-1 W from HI-92 W

3 min (1.6 mi)

1. Head north on Rodgers Blvd

20 ft

2. Turn left onto HI-92 W

0.9 mi

3. Use the right lane to keep right

0.1 mi

4. Slight right onto the Interstate H1 W ramp to Aiea Pearl City

0.6 mi

Take I-H-2 N to HI-99 S/Wilikina Dr

15 min (14.4 mi)

5. Merge onto I-H-1 W

6.2 mi

6. Use the right 2 lanes to turn slightly right onto I-H-2 N (signs for Mililani/Wahiawa)

8.2 mi

Continue on Wilikina Dr to your destination

17 min (9.3 mi)

7. Continue onto HI-99 S/Wilikina Dr

mi

8. Keep left to continue on Wilikina Dr

mi

9. Continue onto HI-803

4.0 mi

10. Continue onto State Hwy 930/Farrington Hwy

0.7 mi

11. At the traffic circle, take the 2nd exit onto State Hwy 930

0.4 mi

12. Turn left onto Kuemanu St/Plantation Rd

Restricted usage road

0.4 mi

13. Turn left

0.1 mi

67-172 Farrington Hwy
Waialua, HI 96791

Attachment 3

Attachment 3

Attachment 3