

# BEST MANAGEMENT PRACTICES FOR ALLIGATOR FARMING IN LOUISIANA

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These BEST MANAGEMENT PRACTICES FOR LOUISIANA ALLIGATOR FARMING are recommended by the Louisiana Department of Wildlife and Fisheries and the Louisiana State University School of Veterinary Medicine and are endorsed by the Louisiana Alligator Farmers and Ranchers Association.

The Louisiana Department of Wildlife and Fisheries (LDWF) manages the American alligator (Alligator mississippiensis) as a commercial, renewable natural resource. Populations are healthy and stable to slightly increasing over time. LDWF's sustainable use program is one of the world's most recognizable examples of a wildlife conservation success story. Louisiana's program has been used as a model for managing various crocodilian species throughout the world. Louisiana's alligator management program consists of two complex segments: research and management of the wild population and a statewide farm/ranch program. The program is funded by self-generated revenues (alligator hide tag fees, shipping label fees and other alligator related fees). Since the inception of LDWF's program in 1972, this program has provided hundreds of millions of dollars of revenue to landowners, trappers and farmers.



### HISTORICAL PERSPECTIVE

Alligators have been used commercially for their leather since the 1800s. This harvest was generally unregulated through the mid-1900s. A gradual population decline resulted in severely reduced harvests in the early 1950s. In 1962, Louisiana closed the alligator season, and initiated research studies focusing on basic alligator life history which led to development of a biologically sound, highly regulated management program. Of tremendous importance was the establishment of a rigorous survey method to estimate and monitor population trends.

From 1962 through August 1972, alligators were totally protected. During this time a myriad of state and federal laws regulating harvest distribution and allocation of take, methods of harvest and possession, transportation and export of live alligators, alligator hides and their products was enacted. Similarly, in 1970 the Louisiana legislature recognized that the alligator's value, age at sexual maturity, and vulnerability to hunting required unique consideration and passed legislation providing for a closely regulated experimental commercial harvest.









The goals of LDWF's alligator program are to manage and conserve Louisiana's alligators as part of the state's wetland ecosystem, provide benefits to the species, its habitat and the other species of fish and wildlife associated with alligators. The basic philosophy was to develop a sustainable use management program which, through regulated harvest, would provide long term benefits to the survival of the species, maintain its habitats, and provide significant economic benefits to the citizens of the state. Since Louisiana's coastal alligator habitats are primarily privately owned (approximately 81%), our sustainable use management program provides direct economic benefit and incentive to private landowners, and alligator hunters who lease land, to protect the alligator and to protect, maintain, and enhance the alligator's wetland habitats. One of the most critical components of the management program was to develop the complex set of regulations which required individual applications for each property to be considered for tag allocation, landowner permission, proof of ownership and detailed review of habitat quality related to alligator abundance, all of which combined to equitably distribute the harvest in relation to population levels.

During the period of total protection (1962-1971) alligator populations increased quickly and by 1972 LDWF was ready to initiate its new sustained use management program.

### **OVERSIGHT BY THE U.S. FISH & WILDLIFE SERVICE**

Five years after Louisiana closed the alligator harvest season, the alligator was listed through the federal Endangered Species Act in 1967. At this time the alligator was considered an endangered species throughout its range. In March of 1974, Louisiana petitioned the Secretary of the Interior, requesting that populations of the alligator in Louisiana be removed from the list of threatened and endangered species in Cameron, Vermilion and Calcasieu Parishes. In subsequent years, similar petitions sought to reclassify the alligator, first in the nine coastal parishes in 1978 and then statewide in 1981. Each of these petitions was based on results of detailed scientific study and the demonstrated success of the early harvest programs that continues today.

Export of alligator hides and products out of the United States is regulated by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This treaty, which became effective in 1975, regulates the international trade in protected species; its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival. The U.S. Fish and Wildlife Service (USFWS) administers CITES requirements and controls for the United States. The species cov-



ered by CITES are listed on one of three Appendices, according to the degree of protection needed by each species. Currently, the alligator is listed on Appendix II of CITES, because of the similarity of their appearance to other crocodilians that are truly endangered or threatened.

In order to fulfill CITES requirements, the USFWS through a series of rulemakings, has a complex set of requirements that the individual states, including Louisiana, must comply with in order to be granted export approval for harvested alligator hides and products. The most critical component in these requirements is that LDWF must certify, on an annual basis, that the harvest programs we administer will not be detrimental to the survival of

the species. The "no detriment" find-ing is predicated on our assessment of the current condition of the alligator population, including trends, population estimates or indices, data on total harvest and harvest distribution and habitat suitability evaluation. Additionally, the management program must provide for a rigorously controlled harvest with calculated harvest level objectives. All alligators and eggs harvested must be taken from specifically identified properties and all hides individually tagged (with approved, serially marked CITES export tags furnished by the USFWS). The USFWS requires strict accountability for each tag allocated to the harvester, requiring all unused tags be returned at the close of the season.

# **FARMING/RANCHING PROGRAM**

Extensive studies conducted by LDWF biologists demonstrated that alligators could be humanely and efficiently cultured and grown in captivity. Egg ranching (collection of alligator eggs from the wild) proved more economical and successful than captive breeding. Additionally, early studies by LDWF biologists documented that a large portion of alligator eggs and hatchlings succumbed to some form of mortality in the wild; including depredation, storm events, fires, and other factors. Ranching provided an opportunity to utilize a surplus resource that may otherwise be lost each year. This further justified egg collections from the wild. Although production from wild nesting would not be totally lost every year, the egg ranching ultimately program guaranteed recruitment into the wild population through the return program. Private egg collections were permitted, on a limited basis, in 1986.

Louisiana's alligator ranching program increased dramatically between 1986 and 1990. To ensure wild alligators were not depleted as a result of egg collections, and to ensure future recruitment of subadult alligators to the breeding population, LDWF initially required a quantity of juvenile alligators equal to 17% of the eggs hatched by the rancher be returned to the wild within two years of hatching. In the first three years of the release program (1988-1990) returns were limited to fewer than 15,000 alligators. Sizes at release were generally small, and averaged 36-38 inches.

Our research and review of the ranching program documented that the released alligators are able to forage for food in the wild, grow well, have high survival rates, and successfully nest in the wild. Thus, we decreased the return percentage to 14%

of the eggs hatched, starting with egg collections in 2000. Continued intensive monitoring and stable to rising survey numbers led us to again decrease the return percentage to 12% of the eggs hatched, beginning with the 2007 egg permits (releases "due" returned in spring/summer 2009), and to 10% of the eggs hatched beginning with the 2017 egg permits (releases "due" to be returned in the spring/ summer 2019). And most recently, the rate will be reduced to 5% of the eggs hatched, beginning with the 2021 egg permits (releases "due" to returned in spring/summer be 2023). Thus, the management program is adjusted when available data warrants a change; although very close monitoring of the effects of this change will continue.

Enormous effort has been made by LDWF to monitor the fate of the alligators released to the wild.

Each alligator released is measured, tail-notched, tagged sexed. recorded prior to release to the same area where they harvested alligator eggs. Although it is costly to the ranchers to fulfill the "returns to the wild" obligation, it is an integral necessity of the program, considering the large number of eggs collected. In recent years when weather conditions and water levels led to excellent nesting efforts, around 500,000 eggs have been collected which averted high hatchling mortality that would have occurred from hurricane impacts.

The economic revenue to Louisiana citizens (landowners, trappers, ranchers, etc) from the alligator program is valued at approximately \$245 million annually in peak years. In light of this tremendous value to the state, we have developed this document entitled "Best Management Practices for Louisiana"

Alligator Farming" to supplement LDWF's Alligator Rules and Regulations. This document is intended to guide alligator farmers and ranchers to ensure the humane treatment of captive reared alligators on farms in Louisiana. Similar documentation for farmed Australian Crocodiles exists ("Code of Practice on the Humane Treatment of Wild and Farmed Australian Crocodiles", 2009, Endorsed by the Natural Resource Management Ministerial Council of the Australian Government) and when applicable, similar practices are herein endorsed. Portions of this document were written by Javier Nevarez, DVM, PhD, of the LSU School of Veterinary Medicine to summarize appropriate care and slaughter of captive alligators.



#### PRINCIPLES OF ANIMAL WELFARE

We must first begin by differentiating animal welfare from animal rights. Animal welfare seeks to ensure the humane and proper treatment of animals recognizing their significant role in society. Animal welfare acknowledges the importance of animals in agriculture as a source of food and other products but seeks to provide these animals with humane living conditions and treatment. Specifically, it aims to provide animals with appropriate physical and mental needs for the species. Animal rights is a more radical view that does not support the use of animals for the benefit of humans and often seeks to abolish any activities that support the maintenance of animals in captivity for any reason.

"The American Veterinary Medical Association, as a medical authority for the health and welfare of animals, offers the following eight integrated principles for developing and evaluating animal welfare policies, resolutions, and actions.

- The responsible use of animals for human purposes, such as companionship, food, fiber, recreation, work, education, exhibition, and research conducted for the benefit of both humans and animals, is consistent with the Veterinarian's Oath.
- Decisions regarding animal care, use, and welfare shall be made by balancing scientific knowledge and professional judgment with consideration of ethical and societal values.

- Animals must be provided water, food, proper handling, health care, and an environment appropriate to their care and use, with thoughtful consideration for their species-typical biology and behavior.
- 4. Animals should be cared for in ways that minimize fear, pain, stress, and suffering.
- 5. Procedures related to animal housing, management, care, and use should be continuously evaluated, and when indicated, refined or replaced.
- Conservation and management of animal populations should be humane, socially responsible, and scientifically prudent.
- 7. Animals shall be treated with respect and dignity throughout their lives and, when necessary, provided a humane death.
- 8. The veterinary profession shall continually strive to improve animal health and welfare through scientific research, education, collaboration, advocacy, and the development of legislation and regulations."

#### Reference:

www.avma.org/KB/Policies/Pages/AVMA-Animal-Welfare-Principles.aspx

As a worker in an alligator farm/ranch, each individual should be adequately trained and is responsible for the welfare of the alligators. If a worker is wit-

ness to any procedures or handling of animals that appears inappropriate or inhumane, they should report this immediately to their supervisor or owner of the farm/ranch. In cases where their supervisor or the owner of the farm/ranch is the individual carrying out the inappropriate treatment of the animals, the worker should contact LDWF to report the problem.



#### INTRODUCTION

Alligator farming or ranching is an industry that utilizes alligators as a renewable natural resource in Louisiana and other southeastern states. The success of the industry depends on the proper management of alligators as a resource. It is important that alligators are managed properly in the wild as well as in captivity. In order for the industry to be successful there must also be a market for the alligators being produced. Part of maintaining this valuable market is to ensure that all farms/ranches are employing humane methods of working with alligators and the utilization of the whole animal. This document will provide information about how to properly handle alligator eggs and the animals throughout their time at the farm/ranch including slaughter, the period before and after slaughter.

 The commercial alligator program in Louisiana consists of a wild harvest, a farm/ranching program, and a nuisance alligator harvest program. Alligator products (raw hides, finished hides, novelty items such as alligator heads and other parts, manufactured leather products, taxidermy specimens, and meat) are traded both domestically and internationally.

- State and federal regulations exist for all aspects of the alligator industry as outlined above. The staff of LDWF closely monitors activities on alligator farms.
- 3. This document will serve as a guideline to ensure captive alligators are cared for with their welfare as a high priority. LDWF encourages that animals be maintained in conditions that ensure their survival and humane care, with minimal stress and disturbance with little or no risk of injury. LDWF endorses slaughter practices that minimize pain and suffering while ensuring human safety.
- 4. As the Louisiana alligator industry continues to grow and develop, it is important that a consistent set of standards and training for the humane treatment of alligators is available to industry participants.
- 5. The standards herein described as "Best Management Practices" (BMPs) are based on current knowledge of alligator welfare issues and what is thought to be the best management practices in humane handling techniques. These BMPs address the unique physiology, behavior, body

- structure, and safety concerns associated with alligators as compared to mammalian or avian animal production systems and are based on ethical veterinarian recommended care and practices.
- 6. These BMPs recognize that few studies exist on alligator methods of slaughter and that alligator sensory perception, physiology, behavior, discomfort and pain awareness are not the same as in mammalian species. LDWF encourages humane treatment and recognizes that this BMP document is a "work in progress" that should be modified as new information becomes available. Research on captive husbandry and slaughter is ongoing and will be monitored closely so any relevant new information might be incorporated into BMPs when obtained.
- 7. These BMPs are intended for use by commercial alligator producers and exhibitors licensed by the state of Louisiana to collect and incubate eggs, raise and exhibit alligators, and harvest alligators for commercial use.

### **BEST MANAGEMENT PRACTICES**

# EGG COLLECTION AND TRANSPORT

- Any eggs of uncertain viability that are not collected must be replaced back in the nest in the original position to ensure the maximum chance of hatching naturally. Avoid mechanical injury by rough handling and restore nest cavity and remaining eggs to precollection condition.
- Eggs should be marked on the upper surface with a non-toxic marker while still in the nest (as they are found in the nest and not rotated), to avoid mechanical injury to the embryo. Eggs should be kept horizontal. They should be packed carefully to avoid rolling or rotation and to avoid damage from rough uneven terrain during boat and vehicle transport. Eggs should not be exposed to direct sunlight and be pro-
- tected from overheating (about 91° F) or exposure to low temperatures (below about 80° F) during collection, transport, and incubation. Adequate humid conditions should be provided to avoid desiccation; yet adequate ventilation must be provided to avoid hypoxia (low oxygen) and allow for adequate gas exchange.
- 3. Female alligators may defend their nests in the wild; when egg collecting it may be necessary to hit the ground or water near the alligator with a pole to make a noise to scare the alligator away. For the safety of the egg collectors as a last resort it may be necessary to deliver a mild brief tap to the alligator's head or nose, which will usually deter it without any injury to the alligator, due to the thick bone in the upper part of the snout and skull. Caution should be taken to not hit the eyes. Use good
- judgment and the least amount of force as possible to gently push the alligator away.
- 4. It is safer to have a minimum of two people in each collecting boat. One can be observant for a guarding female alligator while the other person collects and packs the eggs.
- 5. Each clutch must be kept separate and identified as to permit number and landowner. Records on clutch size, egg viability, and hatch rates should be kept for each clutch.

# EGG INCUBATION AND HATCHING

1. Temperature and humidity regimes are recommended as above (see item #2 under "Egg Collection and Transport"). Avoid fluctuating temperatures. If any eggs appear to die



during incubation, they should be removed to avoid microbes from affecting the other eggs in the clutch or other clutches in the incubator. Discarded eggs should be recorded by each individual clutch for inventory purposes and completion of 10-day egg collection and hatch reports.

- Swelling of the eggs can indicate that they are too damp; consider replacing damp nesting material and/or reducing humidity within the incubator.
- 3. Air spaces under the eggshell may indicate the incubation environment is not humid enough; consider wetting the nesting material and/or increasing the humidity within the incubator.
- 4. If eggs begin to hatch, examine the embryo/hatchling for unresorbed yolk. If present, the eggs may need to incubate longer. Some hatchlings emerge spontaneously; some may need assistance in liberation from the egg.
- It is often best to let the umbilicus dry for a day after hatching before putting the hatchlings in water. If there is unresorbed yolk, a longer period may be needed before placing hatchlings in water.
- 6. Be sure to avoid overcrowding, as hatchlings can easily be trapped if there is a "pile up" and they are pinned underwater and suffocate or are drowned by other hatchlings. They are gregarious and can crowd, especially in corners of pens with shallow water.

# CULTURE FOR ADULT BREEDERS

- Adult alligators maintained out of doors should be in secured facilities with fences buried deeply enough to avoid escape by burrowing. Tops of fences can be angled inward to prevent alligators from climbing over fence tops.
- 2. Provide adequate fresh water of appropriate depth and shaded areas to avoid overheating.
- 3. Outside enclosures should be in rural areas with no or limited access to the general public. This will avoid harassment and exposure to items being thrown into pens to encourage the animals to "move" for photography purposes etc.

### SHED CULTURE/ WELFARE

- 1. Spacing and temperature should be provided as per current regulations.
- 2. Alligators should be separated by size class to avoid fighting and to allow ready access to food for all alligators.
- Alligators should be fed frequently (four to five days a week) or more.
- 4. Alligators should have ready access to clean water. Holding tanks should be cleaned frequently. Daily is preferred but must be weighed against other factors such as observed water quality associated with excess feed decomposition and animal waste, water volume, and animal disturbance associated with more frequent water changes. Washing less often than ideal may adversely affect alligator health, survival, growth, and hide quality.

- Sheds should be insulated enough to provide warmth in winter and encourage growth, and ventilated enough to avoid overheating during the summer months and accumulation of ammonia and odor from waste materials.
- 6. Pest and insect control should be routinely practiced throughout the alligator farm so as to minimize potential disease transfer to captive alligators.

# CAPTURE AND HANDLING METHODS

- Alligators should be handled carefully and professionally when grading and sorting. Do not toss live alligators. Rather, place them carefully in bins, totes, or stalls.
- Small alligators can safely be caught by hand and held by securely grasping them behind the head. Larger alligators may need to be restrained by a short noose snare placed around the neck or upper jaw.
- 3. Capture should be undertaken by trained, experienced personnel to ensure safety of the entire work team, and to minimize stress and struggling by the alligator. This is often safest if conducted in deeper water, where the alligator cannot push off the floor of the pen.
- 4. Covering the eyes of the alligator with a cloth will help limit stress of captured alligators.
- Jaws can be secured with thick rubber bands or electrical or duct tape.
   Care must be taken not to cover the nostrils. Tape or bands should be secure for safety purposes but not so

- tight as to cause depressions or necrosis in the hide.
- For larger alligators, the legs may need to be secured with wide tape if being transported.
- 7. It is recognized that working with alligators has some associated risks but this does not justify inappropriate treatment of the alligators. All workers should have training on how to properly and humanely work with alligators before directly working with the animals. Any person not comfortable working with an alligator in a humane and safe manner should seek assistance and training before doing so.
- 8. While there is some degree of physical strength and force that must be used for capturing and restraining alligators, once captured and properly restrained the animals should be handled in a gentle manner. Workers should always act in a responsible and professional manner keeping in mind the welfare of the animal whenever handling is required, including the time period after the animal hasbeen slaughtered.

# HOUSING AND MAINTENANCE

- 1. The type of housing and maintenance schedules used for alligators varies according to their size and the purposes for which they are being raised; recognizing numerous farm designs are acceptable. Farms should provide the animal with optimum conditions for its physiological functions. Consideration may be given to pen designs that improve safety for workers, without compromising optimal conditions for the animals and which reduce interactions between people and the animals.
- Specific housing requirements (e.g. sheds, buildings, individual pens, and fences) for alligators vary greatly between facilities. Housing requirements are always a compromise between the security of the facility (i.e. to prevent escapes, to prevent entry of people), and the goals of the operation (e.g. tourism and/or commercial farm production), but in all contexts maintaining appropriate welfare standards is a priority.

- As a minimum standard, all captive alligators require:
  - a. source of water of sufficient depth and area to allow the animals to partially submerge and to promote good health
  - where alligators are housed together in enclosures they should be separated by sizes to minimize aggression; individual pens areacceptable as they avoid aggressive conflicts and competition for food provided
  - c. temperature conditions that allow the alligators to maintain optimal body temperatures that promote good health with a water temperature range of 70°-90°F; below 70°F, digestion will slow down significantly and the animal's health may be compromised
  - d. avoid subjecting alligators to extreme hot or cold conditions for prolonged periods of over two hours, or using cold temperatures for the sole purpose of slowing down the growth of animals; any changes in water temperature must be carried out slowly over at least four hours in order to avoid causing a "temperature shock" which could have a negative impact on their health
  - e. Temperatures approximately 77°F or higher will promote faster digestion and growth rates
  - f. an understanding that deeper water provides more living area and might minimize aggressive encounters between animals; in deeper water density is reduced and area per individual increased as size increases throughout the first year(s) of life
  - g. densities of animals vary with size and pen design, but in the first few months of life should not be overly crowded, should avoid "pile-ups" and recognize that deeper water provides more living area
  - regular grading and separation on the basis of size to minimize aggressive interactions between fast and slow growing individuals
  - i. where it pertains to individual housing of larger alligators, work done by the LSU School of Veterinary Medicine, in conjunction with LDWF, revealed no statistically significant difference in the stress

levels (corticosterone) between group housed and individually housed alligators. Also, biological knowledge of the species reveals that adults tend to den individually in small holes in the wild and therefore the individual housing in captivity mimics these conditions. Adults may be also housed in relatively high densities where internal structures reduce visual stimuli and aggressive interactions.

#### HARVEST PRACTICES

- 1. Farmers should refer to guidelines by National and International organizations under the guidance of veterinarians for further details regarding slaughter practices. Current recommendations slaughter methods are based on specific research performed on alligators, methods employed in other species and guidelines from the American Veterinary Medical Association (AVMA) (www.avma. org/sites/default/files/resources/ Humane-Slaughter-Guidelines. pdf), and the OIE Terrestrial Animal Health Code Chapter 7.14: Killing of Reptiles for their skins, meat, and other products (www.oie.int/index. php?id=169&L=0&htmfile=chapitre aw reptiles.htm). The most up to date version of any of these documents supersedes any of the older versions
- 2. The slaughter of animals takes into consideration the safety of the personnel as well as the welfare of the animals. At this time there are three allowed procedures for the slaughter of alligators: penetrating captive bolt, non-penetrating cap- tive bolt, and gunshot to the brain. These procedures cause significant decreases in brain activity due to extensive brain damage and are considered the most humane. The specific allowed procedure used is at the discretion of each facility based on experience and personnel safety and training, but it must always take into consideration the welfare of the
- 3. Slaughter must be as humane and rapid as possible. Recognizing that reptile physiology is markedly differ-

- ent than mammalian physiology, persistent reflexes in alligators may not be an indicator of pain awareness or consciousness.
- 4. The use of a penetrating or non-penetrating captive bolt and firearm is the most effective method of slaughter. While not required, these procedures may be followed by spinal cord severance with pithing of the brain.
- 5. Spinal cord severance and pithing (insertion of a rod into the foramen magnum to destroy the brain) must only be performed in unconscious animals after application of penetrating captive bolt, non-penetrating captive bolt, or gunshot to the brain. Spinal cord severance with pithing of the brain as a single step process in conscious animals is no longer an acceptable method of slaughter.
- Gunshot followed by spinal cord severance with pithing of the brain or gunshot alone may be used, keeping in mind safety considerations of working indoors and ricochet of bullet fragments.
- 7. Other slaughter procedures may be acceptable if they inflict severe brain damage, are humane, and do not pose a high risk to personnel. A veterinarian should be consulted before implementing slaughter procedures not mentioned in this document.
- 8. Up to 72 hours prior to slaughter, it is acceptable to gradually reduce water temperature over at least four hours and reduce feeding schedules (or discontinue), drain water in housing facilities, refill same, and repeat as needed prior to slaughter in an effort

to reduce meat contamination during and post slaughter and processing.

#### **RELEASES TO THE**

#### WILD

- 1. Handle alligators carefully and professionally when grading or sorting. Do not toss live alligators. Place carefully in bins, totes or stalls to minimize or avoid trauma.
- 2. Up to 72 hours prior to return to the wild, it is acceptable to gradually reduce water temperature over at least four hours and reduce feed- ing schedules (or discontinue), drain water in housing facilities, refill same, and repeat as needed prior to return to the wild to avoid regurgitation and aspiration, or defecation by alligators during marking and transport back to the wild.
- Tape mouths of alligators no more than one day before the scheduled release
- 4. Do not pile too many alligators in bins or totes for release those on the bottom of the tote might suffer crush injuries or suffocation.
- 5. Place only a reasonable number of alligators for a reasonable period of time in a 4-foot X 4-foot tote (recommend no more than twenty alligators of approximately 4 feet in length for 30 to 60 minutes). Appropriate adjustments are necessary for larger alligators or for holding alligators for a longer period of time.
- 6. Do not toss sacked alligators onto trailers before release, or toss from bins or

- totes on elevated trucks down to the release table site. Carefully pass the alligator down to the next person.
- 7. Choose release sites in the wetlands carefully. Juvenile habitats consist of shallow ponds, rather than deep canals or large lakes. Release a reasonable quantity in each pond based on pond size. Do not release large quantities in one pond or a canal or roadside ditches. Handle carefully and professionally on releases. Do not throw alligators distances or toss forcefully into water. Release alligators gently over the side of the boat.

## TRANSPORT OF ALLIGATORS FOR RELEASE OR BETWEEN FARMS

- Transport discretely (covered and out of the view of the public on roadways) and with all due attention to alligator welfare. Do not pile sacks. Do not pile multiple "layers" in crates/totes. Do not crowd alligators. Allow ample air space for adequate ventilation and protection from direct sunlight.
- 2. Place animals in a secure trailer to avoid loss of animals during transit.
- 3. Avoid overheating and dehydration; it is particularly easy for hatchlings to overheat.
- 4. For alligators imported into Louisiana for release to the wild (either immediately or after some time period of additional grow-out), the same stan-





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dards as Releases to the Wild 1-7 shall be followed. All efforts must be made to ensure safe and humane transport; keeping alligators separated from each other to avoid piling and contact with rough surfaces that may cause abrasions or any other form of physical injury due to the transport process. Transport temperature must be maintained at approximately 70°-80°F to avoid over- heating. Use of refrigerated trucks is recommended when daytime ambi- ent air temperatures approach 80°F. Before alligators are imported into the state of LA a vet certificate must be obtained from a certified veterinarian before an import permit will be issued. Trucks arriving to the release pro- cessing site with alligators exhibiting signs of heat stress or with dead al- ligators from excessive heat, may re-sult in implementation of a recovery period prior to reconsideration for release.

### QUARANTINE OF DISEASED ALLIGATORS

- Immediate consultation with LDWF staff and Louisiana State University School of Veterinary Medicine (LSUS-VM) is recommended if disease outbreak is suspected. Alligators should be quarantined and preventative measures taken (foot bath washes, cleaning of equipment, etc.) to limit spread of disease.
- In some cases, water temperature deviations from what has been previously stated may be indicated to manage some diseases. In these instances, any deviations in water temperature requirements must be justified and performed under the direction of a veterinarian.



### **SUMMARY**

#### DOS AND DON'TS OF WORKING WITH ALLIGATORS

#### DC

- Seek training and assistance on how to properly handle alligators
- Make sure that you have appropriate tools and equipment before working with the alligators
- · Look out for their welfare
- · Handle them with respect and dignity even after death
- Follow humane slaughter principles
- · Move animals carefully
- · Lay an animal down on the floor or table gently
- Keep in mind they are capable of feeling fear and stress
- Conduct work activities in a professional manner when handling live or dead alligators
- Transport and move animals in a secure way to minimize escape, injury to personnel, and injury to the animals
- · Ask for guidance and training
- Report any mistreatment of the animals to your supervisor, farm/ranch owner, or the Louisiana Department of Wildlife and Fisheries

#### DON'T

- Don't harass, hit, mistreat, scream, or carry out any other action that may be perceived as aggressive towards an alligator
- Don't swing alligators by their tails for either moving them or for slaughter
- Don't slaughter alligators by a blow to the head against the concrete or any other structure
- Don't slaughter alligators by a blow to the head with a hammer or any other tool other than those described in the slaughter section
- Don't place live alligators in ice or in a freezer or refrigerator
- Don't carry out any procedures that may be perceived as unpleasant to the animal, with the exclusion of slaughter procedures
- · Don't use excessive force
- · Don't leave animals in direct sunlight
- · Don't throw animals across the room
- Don't throw or slam animals against the floor
- Don't throw bags or containers holding animals
- Don't attack an alligator for any reason unless the alligator threatens the life of a person

The American alligator is a renewable natural resource and farming/ranching operations help create jobs for many in Louisiana. Workers are directly responsible for the welfare of the animals and must ensure that the animals are being treated humanely. The humane treatment of the alligators must occur at all stages of the operation from the moment of egg collection until the hide and meat are harvested from the carcass. Training of workers in humane handling techniques is available through the LSUSVM (in English or Spanish) and LDWF.

