

To: Amanda Kamps, Tami Ryan, Eric Lobner, Wisconsin Department of Natural Resources

Re: Proposed White-tailed Deer Rehabilitation Requirements 2021

Fellow Mortals Wildlife Hospital, Walworth County, Wisconsin

We have reviewed and discussed the e-mail sent to wildlife rehabilitators by Mandy Kamps on April 16, 2021, along with the biosecurity information and application form provided to wildlife rehabilitators on that date. We understand that at this time we are prohibited from admitting white-tailed deer into care.

Our phone message and website will advise the public to contact the people listed in the SARS-CoV-2 Wildlife Rehabilitation Biosecurity Requirements document directly should they find a fawn believed to be injured or orphaned.

We have read and understand the biosecurity requirements and, with few exceptions easily remedied, we already follow all recommended guidelines and have for many years. As Tami and Eric can verify from visiting our hospital and facilities at both locations, we exceed any minimum standard in any area.

Wildlife rehabilitators provide rehabilitation services at our own expense to benefit the wild resource and the public. In the case of fawn, that expense is considerable, and the addition of disposable PPE will make it more so; still, **if complying with the updated biosecurity requirements is all that is necessary to continue to help, you will have our application.**

Comment on Ban on overwintering rehabilitated fawn:

In the document SARS-CoV-2 Wildlife Rehabilitation Biosecurity Requirements on page 5, it is stated under v. that “no white-tailed deer...will be held in rehabilitation beyond 180 days and overwintering will not be authorized.”

In the listening session held by Mandy at the WRAC meeting on this matter, she answered a query about not allowing over-wintering by stating that ‘everyone else releases in the fall.’ [Paraphrased]

The argument that ‘everybody else [does something]’ is false and deceptive reasoning. Just because a majority of people choose to follow an arbitrary dictate (release at 180 days) instead of following the science (fawns remain with does through the winter and beyond) does not make that choice correct any more than people who declared that all intelligent people believed the earth to be flat were correct when they could not yet be proven wrong.

We first rehabilitated fawn from 1989 to 2003. We have provided for permanent deer (perforce) from 2000 to today. Over the years, the Department’s Secretary, members of wildlife health staff, numerous conservation wardens, and DATCP employees have been to our facility and have witnessed that the deer with us permanently still had an aversion to humans after more than a decade. We have never raised a deer as a pet, and never will.

As chair of WRAC in 2013, when the Department tasked the council to come up with rehabilitation regulations after a decade-long ban of the species—and after an international outcry over the killing of a fawn held illegally when rehabilitation was banned, I laid out the reasons for keeping fawns through the

winter and not being required to tag them visibly. I stand by that reasoning, and what is well known of the natural history and family structure of white-tailed deer.

In a perfunctory literature review, natural history and science do not support an arbitrary release at 180 days:

“Fawn disappearance before 11-12 mo of age was not the result of dispersal away from our study areas....Dispersal behavior of fawns of both sexes is extensive in Illinois but such behavior is almost unknown before 11 mo of age. Fawns of both sexes did not separate from their family groups until their mothers were nearly ready for their next litters[sic] and orphans actually dispersed at higher rates than non-orphans in Illinois....” (Nixon & Etter, 1995)

“Females dispersed from Apr.-Jul. while males dispersed during two periods, with the majority moving in the spring-early summer Apr.-Jul.” (Nixon, et al, 2007)

“...complete behavioral weaning occurs long after the nutritional contribution of milk is negligible (Robbins & Moen, 1975; Sadleir, 1980b), at a time when fawns are certainly capable of surviving without milk (see Scanlon & Urbston, 1978; Jackson, 1977), but presumably obtain non-nutritional (e.g., social) benefits from nursing (Robbins & Moen, 1975).”

We have observed this ourselves with the doe and fawn that have made Fellow Mortals’ properties their homes, where the fawn are still attempting to nurse in the winter months.

Research on fawn survival—whether unorphaned, or post-orphaning, release, or translocation and hard release—paint similarly dire conclusions for the youngest individuals.

“Pen-raised deer may experience higher mortality than their wild counterparts. For example, they may be more subject to hunting mortality and collision with vehicles. Pen-raised deer are normally raised on a pelleted ration and may not forage efficiently on wild foods. Additionally, they may not have been exposed to the same diseases and parasites as wild animals and may not have developed immunities.” (McCall, et al, 1988)

“The high predation rates following release suggested that these fawns may not have had well-developed predator-avoidance behaviors, were in poor condition and could not avoid predators, or that their unfamiliarity with the area contributed to high mortality rates....A total of 14 of 23 (released Sept 26 and Oct 30) and 8 of 19 fawns (released Aug 15 and Sept. 4) during 2000 and 2001, respectively died within 30 days of release.” (Beringer, et al, 2004)

Where Beringer, et al argue that rehabilitation ‘does not appear to be a humane alternative,’ this only reflects on the rehabilitation process as it is practiced within arbitrary timelines and in the absence of attempting to address the numerous disadvantages faced by orphaned and injured fawns brought into the rehabilitation setting, which include: loss of maternal guidance to species-specific behaviors and knowledge of habitat and predators, naivete to human and natural threats, and nutritional disadvantages, to name a few.

A paper concluding that ‘fall orphaning had no influence on survival’ (Woodson, et al, 1980) and which involved purposeful orphaning to simulate orphaning that occurs during the fall hunting season, was challenged 20 years later by Giuliano, Demarais, et al, who revisited the effect of female harvest on orphaned fawns and concluded that “our results suggest orphaning negatively affects white-tailed deer fawns....Being less familiar with the doe's range and occupying a smaller home range may have put orphaned fawns at a disadvantage, leaving them unaware of ephemeral resources such as water and cover, and potential dangers such as predators and hunters. These disadvantages would reduce survival. Our data support this conclusion: orphaned fawns had lower survival rates than unorphaned fawns...” (Giuliano, et al, 1999)

With all the documented research into white-tailed deer behavior that supports anecdotal evidence that fawns remain with the doe throughout the winter, there is no scientific basis for requiring release at or prior to 180 days.

In fact, we have been following the research all along, which is why our rehabilitation protocol includes providing natural forage and cover supplemented by a pelleted diet; removes fawns from human contact after weaning; provides time (overwintering) for the animals to grow out of the most vulnerable period for predation; does not put them in immediate danger from a threat for which no wild animal is prepared (hunting); releases at a location remote from human activity; and into an environment that they already know by sound, sight, and smell, and substrate, which is occupied by wild deer who also already know them by sound, sight, and smell.

“...rearing practices developed to increase the wariness of pen-raised game birds may similarly increase the wariness and survival of pen-raised deer....Use of automatic feeders and watering devices reduces contact with humans. In addition, adding cover, such as shrubs, to rearing pens possibly increases use of cover in the wild.” (McCall, et al, 1988)

The fact that other rehabilitators choose to follow an arbitrary guideline instead of following the science is not compelling evidence that we should do the same.

In the document SARS-CoV-2 Wildlife Rehabilitation Biosecurity Requirements on page 5, it is stated under 5. Reporting, that “clinical signs suspicious of SARS-CoV-2 in animals include fever, coughing, difficulty breathing or shortness of breath, lethargy, sneezing, nasal discharge, ocular discharge, vomiting, diarrhea.”

It is not stated what happens next if any of these conditions are reported.

An orphaned or injured fawn brought to a wildlife rehabilitator often has not received colostrum from the doe and, as is well known, animals that don't acquire passive immunity from colostrum are at increased risk of “diarrhea, pneumonia,” and many other conditions.

If a fawn has become hyperthermic prior to intake, its temperature will be elevated to “fever” level.

If a fawn has been in wet or cold conditions prior to intake, it may have upper respiratory symptoms, including “difficulty breathing, shortness of breath, sneezing, nasal discharge, and ocular discharge.”

Any fawn adjusting to a new environment, suffering an injury in conjunction with orphaning, or adjusting to replacement formula will develop diarrhea.

What exactly follows if a report of one of these conditions is made to Dr. Lindsey Long, Amanda Kamps, and Tami Ryan?

Is the animal to be quarantined? Will specific tests be required? Is there a potential for the department to require euthanasia of the animal in the absence of definitive diagnosis?

Regarding 'quarantine' in general: Anyone who has ever worked with white-tailed deer fawn knows that animals habituate easily and within 24 hours. Whether such habituation can be reversed is an individual matter and up for debate. Like some disease, the intensity of exposure plays a part.

We would need more information on what is involved in the reporting process and aftermath before deciding to apply to rehabilitate deer in 2021.

In the document SARS-CoV-2 Wildlife Rehabilitation Biosecurity Requirements on page 5, it is stated under v. that "all white-tailed deer will be ear-tagged with DNR provided tags prior to release..."

Before addressing this requirement, I want to point out that we volunteered to tag the deer we released Spring of 2021—because delay in moving them to the secondary habitat required that they be tranquilized with drugs that would not be completely metabolized prior to release to the wild. This is the only reason that we tagged these individuals—which included one that survived and recovered from traumatic birth and a fractured leg when the doe was hit by a car and aborted.

From 1989 to 2003 and then when deer rehabilitation became legal again in 2014, we were still operating from one location where release on-site was not possible; we had to tranquilize the deer in the spring to move them to a release site; all deer were therefore tagged as required when drugs are used.

As wildlife rehabilitators, we are even more interested in what happens post-release than the Department is. We invest over \$1,000 in each fawn before adding the cost of additional PPE.

We have had reports of a healthy adult three-legged buck killed by bow—and the bow hunter didn't know he was missing a leg until he got right up to the animal. We have had people watch the same rehabilitated doe for years as she raised her own fawns. We have had reports of animals that were shot or hit by cars.

As the Department knows, in the years between the banning of rehabilitation and it again being allowed (2003-2014), social media has changed the way people interact with their environment and with others.

Where an incident prior to this explosion of information may have had a localized effect and reaction in the past, it now quickly builds and spreads across states and demographics without regard for underlying facts. Giggles.

In addition to the rise of social media is the rise in use of technology. Almost everyone has a trail camera or some type of surveillance system.

A few months after the release of our tagged deer in 2014, we received a call from one of our wardens because a property owner had spotted a tagged deer on trail cam and reported it 'in case it was sick.' He and we checked the photo of a stocky, healthy doe that was blowing its coat.

Add to this the fact that captive raised deer farm deer are tagged and quite often escape, prompting a call to the public to 'remove them from the landscape' and press releases and interviews with Department employees that do not differentiate between one tagged deer and another—and the tagged rehabilitated deer have just one more disadvantage in the wild.**

Into this environment add the possibility of repercussions as a result of an incident, for example an accident involving a tagged deer, and it takes little imagination to envision condemnation and potential legal liability as a result. As someone with experience in the legal field, I have learned to be cautious. To stand accused is often to stand judged.

Wildlife rehabilitators can only play the hand they're dealt, whether it's a newborn fawn with a broken leg that comes from a CWD-affected area, or it's a fawn that has been habituated by people before being brought to them for care.

We cannot be held responsible or accountable for what we cannot control.

It was specifically because of our concern about tagging the rehabilitated animals that we built a \$50,000 one-acre secondary habitat at our 52-acre property near Burlington, complete with automatic waterers and remote feeding capability.

This secondary location is gated and inaccessible to anyone but our staff; it has allowed us to move the weaned fawns from their first outdoor habitat at our Lake Geneva property without the use of tranquilizer and provides fawn with a spacious area with natural browse and cover that allows them to run and exercise and grow larger and stronger before release as a family group.

Building this large habitat that allowed us to provide a safe habitat after weaning means that animals can be released after the worst of winter and its frigid temperatures and lack of access to forage pass, and after hunting season in Walworth county (January 31 for the 'holiday hunt' in 2020) ends, providing the rehabilitated fawn the best chance of survival possible given that they come from a place of great disadvantage at the start, having lost the ability to learn and follow the doe through the summer, fall and winter seasons, as would happen naturally.

According to the information that was provided to rehabilitators, the reason for tagging rehabilitated deer on release is that if a deer is found sick or dead and tested and found to have SARS-CoV-2, it can be traced back to the rehabilitator; and—even though it can't be proven that the animal contracted the virus while in the rehabilitator's care—that information can be used to inform the department and the rehabilitator of potential issues with biosecurity.

If the only reason for tagging rehabilitated deer is to ascertain if they were exposed to SARS-CoV-2 once in the wild, then tagging with a discrete metal tag, as was done in the past, should be sufficient.

We would agree to tagging in this way, for this specific purpose, until further research proves or disproves the susceptibility of white-tailed deer as a reservoir for the virus.

Conclusion:

In Warbington, et al's 2017 study of fawn mortality, the authors conclude that "...fawn survival appears to be unusually dependent on complexities in *local ecological contexts* such that *management outcomes in discrete areas may not be predictable by making analogies to published research*. Hence, programs to influence fawn survival may be especially dependent on careful local monitoring to determine whether management is achieving the desired results." *Emphasis supplied*.

It seems evident through Mandy's individual outreach to deer rehabilitators that while the Department has promulgated guidelines for the rehabilitation of white-tailed deer fawn in the presence of SARS-CoV-2, it recognizes that every rehabilitator has different facilities, resources, and organizational structure, and is located in its own unique region with its own unique wild and human populations within its own unique ecology.

We understand it is hard to regulate wildlife rehabilitators individually, but for this particular policy—in order not to fail the public, the animals, and the people on the front lines, it is a scalpel that is needed, not a hammer.

Literature Cited:

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**<http://archive.jsonline.com/sports/outdoors/129596163.html> Ear-tagged deer are legal game.

Deer that have been ear-tagged or radio-collared as part of Wisconsin's deer research projects are legal game. In fact, researchers want to make sure hunters don't treat such animals differently because of their markings. Such "special" treatment would bias the results of the study. To make sure hunters are aware the marked deer are legal for harvest, the Department of Natural Resources is distributing thousands of brochures in the northern and eastern study areas before the fall hunting seasons.

<https://www.wpr.org/hundreds-escapes-state-deer-farms-reported-2013> Thousands of escapes reported from state deer farms since 2013.

<https://www.detroitnews.com/story/news/local/michigan/2017/11/14/dnr-probes-origin-25-point-bagged-buck/862341001/> Michigan: "The deer had an ear tag, and the hunter knew that meant it was an escaped deer from a facility," she said. "So he brought it to a deer check station and that's how we were able to confirm its point size."