# An Assessment of the Buddhist Practice of Life Release in North America

#### Tim Campbell UWEX Natural Resources Institute Wisconsin Sea Grant Wisconsin DNR @t\_campy

Dr. Bret Shaw Luye Bao Shiyu Yang Peter Jurich Sara Fox Dr. Evelyn Hammond UW-Madison











### What do we already know about this practice?

- Theology
  - Compassionate acts earns karma
  - Saving lives
- Impacts
  - Limited to studies in Asia
- Origin of practice
  - It could be just as much cultural as religious

# So what do we know about this practice in North America?

N.Y. / REGION GOOD FOR KARMA. BAD FOR FISH?

#### Buddhists Release Animals, Dismaying Wildlife Experts



 Take Action
 Join
 Renew
 Donate Now

 Audubon
 News
 Features
 Birds
 Get Outside
 Conservation
 About Us
 P

 From the Magazine
 January–
 February 2014

#### A Buddhist Ritual Gets an Ecologically Correct Update

"Release life," the practice of freeing caged animals into the wild to generate good karma, is now an environmentally friendly act of kindness.

#### Ƴ 🖬 🗠

By Rachel Nuwer January-February 2014

#### Popular Stories

The 2017 Audubon Photography Awards: Top 100

Hog Island's Osprey Pair Lose Chick to Nighttime Owl Raid

Like Humans and Apes, Ravens Have the Foresight to Save Up for the Future

How to Tell a Raven From a Crow

Why a Hawk Is a Hummingbird's Best Friend



Photo: Photograph by Matt Carr

#### A Buddhist Tradition to Save Animals Has Taken an Ugly Turn

#### A religious revival

SUBSCRIBE

WILDLIFE WATCH

Animal spirits

Releasing animals into the wild is in vogue-with unwelcome consequences



SCIENTIFIC AMERICAN

English 🗸 Cart 🧧 Sign In | Registe

THE SCIENCES MIND HEALTH TECH SUSTAINABILITY EDUCATION VIDEO PODCASTS BLOGS STORE  ${f Q}$ 

EVOLUTION

Buddhist Ceremonial Release of Captive Birds May Harm Wildlife [Slide Show]

Buddhists across Asia release wildlife as a show of compassion, but conservationists find that the practice tortures the animals and may impact threatened species

# In the peer reviewed literature

#### LETTER

#### The influence of traditional Buddhist wildlife release on biological invasions

Xuan Liu<sup>1</sup>, Monica E. McGarrity<sup>2</sup>, & Yiming Li<sup>1</sup>

<sup>1</sup> Key Laboratory of Animal Ecology and Conservation Biology, Institute of Zoology, Chinese Academy of Sciences, 1 Beichen West Road, Chaoyang, Beijing 100101, China
<sup>2</sup> Department of Wildlife Ecology and Conservation, University of Florida/IFAS, 110 Newins-Ziegler Hall, PO Box 110430, Gainesville, FL 32611, USA

Diversity

# Site and species selection for religious release of non-native fauna

Ryan J. Wasserman <sup>(i)</sup>,<sup>1,2</sup> Jaimie T. A. Dick,<sup>3</sup> Rebecca J. Welch,<sup>4</sup> Tatenda Dalu <sup>(i)</sup>,<sup>5</sup> and Kit Magellan<sup>6</sup> <sup>1</sup>School of Science, Monash University Malaysia, Jalan Lagoon Selatan, 47500 Bandar Sunway, Subang Jaya, Selangor Darul Ehsan, Malaysia, email ryanwas21@gmail.com

### ECOSPHERE

#### Ecological knowledge reduces religious release of invasive species

XUAN LIU,<sup>1</sup> MONICA E. MCGARRITY,<sup>2</sup> CHANGMING BAI,<sup>1,3,4</sup> ZUNWEI KE,<sup>1,3,5</sup> and YIMING LI<sup>1,†</sup>

<sup>1</sup>Key Laboratory of Animal Ecology and Conservation Biology, Institute of Zoology, Chinese Academy of Sciences, 1 Beichen West Road, Chaoyang, Beijing 100101 China
<sup>2</sup>University of Florida/IFAS, Department of Wildlife Ecology and Conservation, 110 Newins-Ziegler Hall, P.O. Box 110430, Gainesville, Florida 32611 USA
<sup>3</sup>University of Chinese Academy of Sciences, 19 Yuquan Road, Shijingshan, Beijing 100039 China
<sup>4</sup>Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, Qingdao 266071 China
<sup>5</sup>Department of Biology, Chemistry and Environment Engineering, Yunyang Teacher's College, Shiyan 442000 China

#### Religious release promotes species invasions

X. Liu et al.

	Location	Taxa released <sup>b</sup>					Religion <sup>c</sup>						
Source <sup>a</sup>		I	F	А	R	В	м	U	в	Т	С	Ρ	0/
Sherwood (2001)	Australia	•	•			•	•		•				
Rutledge (2005)	Australia	•							٠				
Severinghaus & Chi (1999)	Cambodia					•							•
Shiu & Stokes (2008)	Canada (Vancouver)							•	•				
Shiu & Stokes (2008)	Canada (Toronto)							•	•				
5hi et al. (2009)	China (Mainland)				•				•				
Shiu & Stokes (2008)	China (Tibet)							•	•				
Anonymous (2007)	Hong Kong					•			•				
Chan (2006)	Hong Kong					•			•	•			
Severinghaus & Chi (1999)	Hong Kong					•							•
Severinghaus & Chi (1999)	Malaysia					•							•
.im & Lim (1992)	Singapore				•								•
Agoramoorthy & Hsu (2005)	Taiwan	•	•	•	•	•	•		•	•			
Agoramoorthy & Hsu (2007)	Taiwan	•	•	•	•	•	•		•	•			
Chen & Lue (1998)	Taiwan				•				•				
iao et al. (2010)	Taiwan		•										
ing (1972)	Taiwan				•				•				
Severinghaus & Chi (1999)	Taiwan		•		•	•			•	•	•	•	
-chia (2011)	Taiwan		•			•			•				•
(astner (2011)	Taiwan		•		•	•			•	•			
Harvey (2007)	Thailand					•			•				
Severinghaus & Chi (1999)	Thailand					•							
Anonymous (1993)	USA (California)				•				•				
Zimmerman & Herrmann (1996)	USA (Illinois)												
Anonymous (2004)	USA (Maryland)		•										
Guilfoil (2011)	USA (Massachusetts)	•											
West (1997)	USA (New Jersey)		•						•				
Fuoco (2001)	USA (Pennsylvania)	•	-						•				
Severinghaus & Chi (1999)	Vietnam				•								
Anonymous (2003)	Vietnam												-

Table 1 Evidence for global occurrence of religious wildlife release: Results of a search of literature and news reports

<sup>a</sup>Bibliographic results of a search of literature and news reports, see Appendix S4.

<sup>b</sup>Taxa released: I = invertebrates; F = fish; A = amphibians; R = reptiles; B = birds; M = mammals; U = unspecified.

<sup>c</sup>Religions: B = Buddhism; T = Taoism; C = Catholicism; P = Protestantism; O/U = other/unspecified.



In Paterson's West Side Park Sunday, followers of a New York Amitabha Buddhist sect took part in a ritual in which live reptiles were released into the Passaic River. Environmental officials in two states are trying to track down the group.

Specimen ID	241066				
Group	Fishes				
Genus	Monopterus				
Species	cuchia				
Common Name	cuchia				
State	NJ				
County	Passaic				
ocality	Passaic River at Paterson's Westside Park				
Apping Accuracy	Accurate				
HUC8 Name	Hackensack-Passaic				
HUC8 Number	02030103				
HUC10 Name	Lower Passaic River				
HUC10 Number	0203010308				
HUC12 Name	Peckman River-Passaic River				
HUC12 Number	020301030802				
	First     Topo       1000     Road       2009 n <sup>2</sup> First       2009 n <sup>2</sup> Poughkeepsie       Scranton     Middetown       New Jerser     Denbury       New Jerser     Orenwich       Scranton     New Jerser       New Jerser     Orenwich       Paterson     New York       Paterson     New York       Eleton     Paterson       Vinite Rtans     Stamford       Paterson     New York       Eleton     Eleton       Allentown     Eleton       1254 /r     368 /r       ading     Zotin,       Trenton     Zotin,				
Collection Day	11				
Collection Month	8				

Year Accuracy

Potential Pathway

Actual

released for food

# So what did we know about this practice in North America?

### Not a lot

- Who is practicing it and how often?
- What is being released?
- What are the requirements of the practice? What is open to interpretation?
- How can we meet the intent of the practice while reducing/eliminating the risk of introducing invasive species?

# MRBP Scope of Work

- Literature review
  - Develop understanding of the practice
  - Risk assessment
- Practitioner interviews
  - Develop understanding of the practice
  - Risk assessment
  - What other practices meet the intent of "life release" teachings?
  - How can we engage with the Buddhist community?
- AIS professional survey
  - What options that meet the intent of the practice are acceptable to managers?
- Communication products
  - Fact sheets
  - Peer reviewed literature

# MRBP Scope of Work

- Literature review
  - Develop understanding of the practice
  - Risk assessment
- Practitioner interviews
  - Develop understanding of the practice
  - Risk assessment
  - What other practices meet the intent of "life release" teachings?
  - How can we engage with the Buddhist community?
- AIS professional survey
  - What options that meet the intent of the practice are acceptable to managers?
- Communication products
  - Fact sheets
  - Peer reviewed literature

### Literature Review

- Chinese literature
  - Peer-reviewed, popular literature, social media
- English literature
  - Peer-reviewed, popular literature, social media
- Complete
- What we've learned
  - Theology
  - Motivations
  - Compassion/"Virtuous mind"
  - Discussion of environmental issues



放生是佛教的一项重要按事,	还是在佛教传入中国之后。	佛之行仅繁密相连约。戒杀是五
由于历代离僧大德的提倡,它与素	佛教是一个注重培养慈悲心、	戒、十戒等之第一戒,向来为佛教
食一样。早已或为中国权地佛教徒	主张非暴力的宗教,佛门第一戒即	徒所严守。南朝齐、紫之际,佛教徒
的一种习俗。近年以来,随着人们	为戒杀,佛经中讲述佛陀及其弟子	即依据《楞伽经》卷四中"不应食
动物保护意识的增强和生活水平	过去生中放生护生的故事极多。尤	肉"等语而行新肉。梁武帝就普下
約提高,各地像教徒的放生活动也	其是大乘佛教,认为一切众生皆有	诏蔡止杀生,并令各寺设放生施,
日见增多、但为什么要放生,应如	佛性,无量动中同为六亲眷属,强	又废止亲庙供献牺牲之制。我国大
何放生,不仅许多教外人士不理	调要普度众生、极力宣扬戒杀菇	规模放生则始于隋代天台智者大
解,就是许多佛教徒也不清楚,以	素、放生护生。这些与儒家所谓"亲	师。智者大师居斯江天台山时,为
政盲目放生,造成一些事与愿违的	亲而仁民,仁民而爱物*、*己所不	使指海居民莫以捕鱼杀生为业。曾
情况,或遭到外界的利用、非议甚	欲。勿施于人*、*人皆有侧隐之	自舍身衣,并劝募众人购置放生
至阻挠。放生本来是一件善事。但	心"、"君子远庖厨"的理念不谋而	他,复传授他中黩类"三皈或",为
善事要亦好,就离不开积极的宣传	合,从而为国人从文化心理上理解	彼等说(金光明经)、(法华经)等,
与正确的引导,在当今多元开放的	和支持佛教的放生活动奠定了基	以结祛缘,从而开天白放生会之耄
法制社会,正确认识、合理规范放	48.	觞。其后,唐肃亲于乾元二年(759)
生活动尤其必要。	我国佛教的放生,是与戒杀念	下语,在山南道、剑南道、州南道、

一、放生习俗的新孢与形成 中国权地的放生活动古已有 之。(例子,说符篇)载:"正旦放生, 示有思也。""客曰:"民知罪之欲放 之,竟而嫌之,所者众矣。罪如欲生 之,不若寒民勿嫌,捕而放之,思过 不相补矣。"做子曰:"善!""可见, 早在春秋战国时代,我因仅地即有 在特殊日子放生的说法,甚至已出 现了专门捕鱼与以供放生的情况。 但持续、广忙的放生习俗的形成,



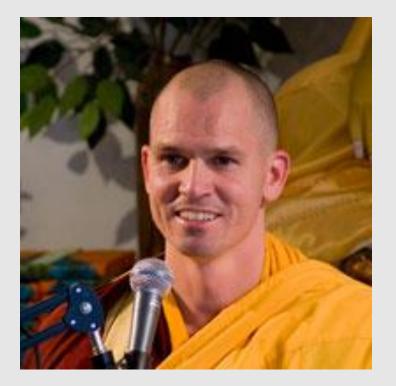
日本东大寺放券有许多量肥,忽然自得于胜人之间,成为秦良一日

デキタ (身身をおおき) 教音 42 11994-2018 China Academic Journal Electronic Publishing House, All rights reserved, http://www.enki.net

### **Practitioner Interviews**

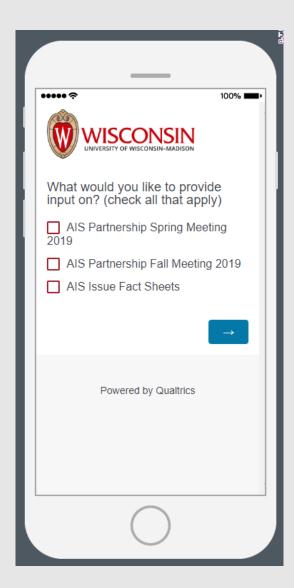
#### Recruitment

- Student used snowball sampling approach
- 440 locations contacted throughout United States
  - Temples
  - University programs and clubs
- Took way longer than we thought
- Interviews and analysis
  - 11 Interviews of ~30 minutes
  - Interviews were coded by 3 people
  - Codes were combined and an evaluation report created
  - Hopefully an MBI ICAIS pub!



# **AIS Professional Survey**

- Will be starting soon
- Nationwide
- What variations of the practice are people comfortable with?
- What level of engagement are managers willing to invest in?
- Are you willing to engage with the community?



### **Communication Products**

- Peer reviewed paper
  - Management of Biological Invasions
  - Religion and the Environment
- Fact sheets
  - For practitioners
    - Best practices for release
    - Potential laws to check on
    - Similar practices
    - Who to contact
  - For managers
    - About the practice
    - How staff can help
    - Conversation guide



CONTACT Tim Campbell tim@aqua.wisc.edu 608-265-4164



#### Clean Boats – Clean Tournaments Best-Management Practices to Inspect and Wash Fishing Tournament Boats

FISHING TOURNAMENTS HAVE THE POTENTIAL TO spread aquatic invasive species (AIS) through both the movement of tournament equipment between tournament locations and through the movement of the tournament anglers themselves between events. These best-management practices (BMPs) are designed to be effective and easy to implement. Using a "Good-Better-Best" approach allows organizers to select their level of AIS prevention based upon available resources. AIS such as zebra mussels, Eurasian watermilfoil, diseases or pathogens, and AIS used as bait, can spread via tournaments. By implementing these BMPs, tournament organizers can prevent the spread of AIS, protect natural resources and help ensure the future of tournament fishing. Diligent record keeping in combination with use of the BMPs will document your commitment to AIS-free tournaments.

AIS can spread as visible plant fragments, organisms attached to plant stems or the boat and equipment. But AIS can also be invisible to the naked eye as minute eggs, larvae or pathogens in water. Taking a few, quick and simple steps will help assure that tournament or angling activities do not allow the spread of AIS between waters.

Inspection and removal of vegetation, organisms and debris is the first step and the backbone of the Stop Aquatic Hitchhikerst camaging. Drying tournament anglers' boats for five days may not be possible, so rinsing the boatis an appropriate next step. Rinsing with high pressure water removes nearly all the organisms visible that may be adhering to the hull and trailer. Hot, high-pressure water kills attached organisms as well as removes them.



### What we've learned

### Who is practicing life release?





### It can be just as much cultural as religious

### Who is practicing life release?





## When and where of practice

#### Planned

- Hosted at temple or park
  - "Often in the United States, we have the event quite often during the summer."
- Perhaps associated with days of significance
  - "The day of the Buddha's enlightenment, which is usually in the spring, they say that the karma on that day is much, much higher "
- Community event
  - We have ours at a park because it's nice to have a picnic afterwards
- Spur of the moment
  - For someone (celebration or for well wishes)
  - An act of compassion (fish at restaurant)
- Where
  - "may you live out your natural life span and not be eaten by other creatures. "



## When and where of practice

#### • Planned

- Hosted at temple or park
  - "Often in the United States, we have the event quite often during the summer."
- Perhaps associated with days of significance
  - "The day of the Buddha's enlightenment, which is usually in the spring, they say that the karma on that day is much, much higher "
- Community event
  - We have ours at a park because it's nice to have a picnic afterwards
- Spur of the moment
  - For someone (celebration or for well wishes)
  - An act of compassion (fish at restaurant)
- Where
  - "may you live out your natural life span and not be eaten by other creatures. "
- 11 interviews out of 440 contacts says something...
  - We didn't hear back from many contacts
  - Two common responses were "we do not know of that practice" or simply "We don't practice that"



### What is released



I think we're worried about this

### What is released



I think we're worried about this





But I think we're more likely to get this



We believe that we can help practitioners meet the intent of the practice in an environmentally sustainable manner and reduce invasion risk

## Alternative practices

- Specific variations of the practice
  - Brainstormed with local expert
- Wildlife rehabilitation programs
  - Animals would die otherwise
  - Release is an end goal
  - Pet rescue and rehoming programs could work, too
- Alternative solo practices
  - Releasing a fly outside vs killing it
  - Being vegetarian
- Every interview welcomed expert engagement
  - Experts can help make needed connections
    - You'll see how next slide
- Permit program
  - Could help standardize practices
  - Could lead to more engagement
  - Permit program vs voluntary BMPs
    - Could work for planned events, but solo practice?

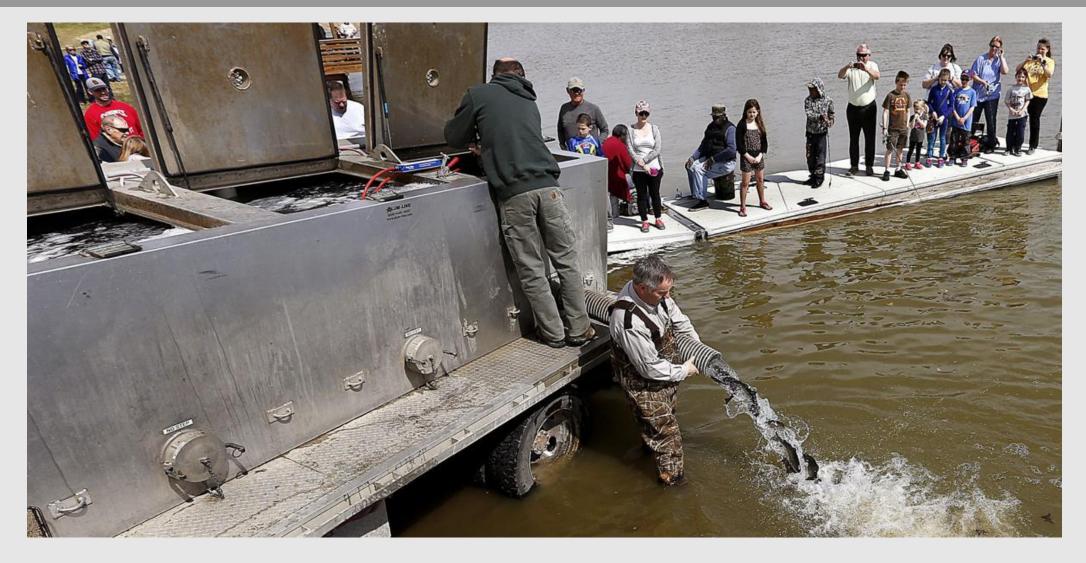


PHOTO: J. HESSION/CENTER FOR WILDLIFE

An eagle regains its freedom after rehabilitation.



### Oyster reef restoration



### Unannounced stocking of put and take fisheries

### In Summary

- It happens
  - Planned events likely have the lowest risk
  - Unplanned events are likely riskier and hard to anticipate
- We believe there are low risk ways to practice this
  - Promote planned events with low or no risk species
  - Promote alternative acts of compassion for unplanned events
- Practitioners welcome engagement
  - It is likely needed to establish some of these variations of the practice



#### Tim Campbell

Tim.Campbell@wisc.edu 608-265-3727 @t\_campy



