

**“THE KINGS AND QUEENS OF
PROMISE:”¹
DIFFERENCES BETWEEN WHITE
TIGERS’ AND YELLOW TIGERS’
MATING BEHAVIORS IN CAPTIVITY**

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I. INTRODUCTION

In 2013, Leonardo DiCaprio donated \$3 million through the Leonardo DiCaprio Foundation (LDF) to build watchtowers and other structures to help save wild tigers.³ Their comprehensive conservation plan focuses on breeding.⁴ His funds helped to save both white tigers and yellow tigers and provide World Wildlife Fund (WWF) with a greater stake in their

¹ Thirty Seconds to Mars, “Kings and Queens” (2010). *Available at* <https://www.youtube.com/watch?v=hTMrLHHVx8A>

² Dedicated to pine.

³ Christie D’Zurilla, “Leonardo DiCaprio Donates \$3 Million to Benefit Wild Tigers,” *LOS ANGELES TIMES*, November 21, 2013. *Available at* articles.latimes.com/2013/nov/21/entertainment/la-et-mg-leonardo-dicaprio-donation-tigers-20131121

⁴ Kate Thomas, “Protecting Wild Tigers in Nepal,” Leonard DiCaprio Foundation. *Available at* <https://www.leonardodicaprio.org/protecting-wild-tigers-in-nepal/>

longstanding commitments to receiving and investing donations for beloved white tigers.⁵ This great leadership caused the public to fortify its interest in humane treatment of white tigers in the wild and captivity.⁶

White tigers may be bred in captivity through zoos, sanctuaries, and breeding programs.⁷ They may be afforded ideal conditions for their species.⁸ Many are treated according to survival plans and other regimens.⁹ While white tigers often are treated humanely under relevant laws, such as Animal Welfare Act and Endanger Species Act, they may be deprived of circumstances that are ideal because captors misunderstand their distinctions from other animals, including yellow tigers.¹⁰ Yet, like others,

⁵ *Id.*

⁶ D'Zurilla, "Leonardo DiCaprio Donates \$3 Million to Benefit Wild Tigers."

⁷ CARMEN M. CUSACK, *MUTATED SYMBOLS IN LAW AND POP CULTURE* (2018).

⁸ *Id.*

⁹ Carmen M. Cusack, *Save the White Tiger*, 12 J. L. & SOC. DEVIANCE 1 (2016).

¹⁰ Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973). Animal Welfare Act, 7 U.S.C. §§ 2131–2159 (2018); 18 U.S.C. § 49 (2018). Endangered Species Act of 1973, 16 U.S.C.A. § 1531, *et seq. Infra* Section II.

their offspring may be subjected to mistreatment for entertainment.¹¹ This paper argues that white tigers should be permitted to breed naturally and with necessary human intervention. Section II discusses relevant laws, including those requiring cubs to be humanely treated. This section advocates for increased protection. It addresses blatantly inaccurate rumors that white tigers are inbred and deformed. Section III presents data documenting how white tigers mating in captivity may differ from yellow tigers, who mate in captivity. Therefore, their accommodations, such as enclosures, enrichment, and meals, should conform to their special needs, which may be individualized. Methods and analyses are discussed in Section III. Section IV concludes that increased education about white tigers is necessary and helpful for the proliferation and comfort of the captive species. Distinctions between yellow tigers and white tigers, who mate in captivity, demonstrate speciation or personality differences

¹¹ Cusack, *Save the White Tiger*.

that should receive attention and resources from human caretakers and the public (e.g., donors).

II. WELFARE

A. Law

Dozens of international, federal, state, and local laws, agreements, and policies protect white tigers and ensure their comfort in captivity, including procreative fulfillment and sexually recreative activities.¹² White tigers are protected from unsustainable trade under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).¹³ Signatories enforce their agreement while “recognizing that wild fauna and flora in their many beautiful and varied forms are an irreplaceable part of the natural systems of the earth which must be protected for this and the generations to come; conscious of the ever-growing value of wild fauna and flora from aesthetic, scientific, cultural,

¹² See Section II.

¹³ Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973).

recreational and economic points of view.”¹⁴ Trade is subject to treatment in consideration of flourishing, beauty, and animals’ enjoyment.¹⁵ Endangered Species Act protects white tigers and may be enforced through a court order.¹⁶ Animals’ needs must be met by housing facilities.¹⁷ Rhinoceros and Tiger Conservation Act is a patchwork with Endangered Species Act that is enforced by several agencies, including the United States Coast Guard.¹⁸ Animal Welfare Act protects those white tigers living in research and exhibition facilities.¹⁹ Research is incomplete without consideration of animals’ sexual needs and behaviors. Reproductive studies and recreational settings are particularly impaired when animals are forced to breed in captivity in less than conducive and accommodating settings. The Lacey Act ensures

¹⁴ *Id.* at Preamble.

¹⁵ *Id.*

¹⁶ Endangered Species Act of 1973, 16 U.S.C.A. § 1531, *et seq.* Kuehl v. Sellner, 2016 WL 3429679 (unpublished) (N.D. Iowa June 17, 2016).

¹⁷ Kuehl v. Sellner (2016).

¹⁸ 16 U.S.C. §§ 5301–5306 (2018).

¹⁹ 7 U.S.C. §§ 2131–2159 (2018); 18 USC § 49 (2018).

that poachers have no streams of commerce in the United States.²⁰ Captive Wildlife Safety Act protects animals, who are traded, and could be released to the wild.²¹

According to United States Fish and Wildlife Service, only exempt individuals and organizations, such as sanctuaries, may transport white tigers in interstate traffic.²² Exempt sanctuaries must not breed white tigers.²³ Those organizations that allow white tigers to mate may be differentiable from organizations with breeding regimens (e.g., in vitro and other fertility measures).²⁴ Organizations that disregard animals' sexual and reproductive decisions (e.g., abstinence and indifference) ought to receive training about behaviors in sexual scenarios; rely on

²⁰ 16 U.S.C. §§ 3371–3378 (2018).

²¹ 16 U.S.C.A. § 3371(g) (West Supp. 2004). *Legislative Review*, 11 ANIMAL L. 325 (2004).

²² Fish & Wildlife Service, "Captive Wildlife Safety Act or CWSA." *Available at*

<https://www.fws.gov/le/pdf/CaptiveWildlifeSafetyActFactsheet.pdf>; Fish & Wildlife Service, "Questions and Answers U.S. Captive-bred Inter-subspecific Crossed or Generic Tigers Final Rule," April 6, 2016. *Available at*

<https://www.fws.gov/home/feature/2016/pdfs/Generic-Tiger-Final-Rule-FAQs.pdf>.

²³ *Id.*

²⁴ *Id.*

animals' behaviors; and accordingly curtail breeding expectations.²⁵

B. Petting

Animals in captivity may be subjected to petting.²⁶ Although exhibition serves a compassionate purpose—to assure the public that the animal's welfare is of primary significance to the owner—hands-on experiences are verboten.²⁷ Legislation prevents white tiger cubs from being pet.²⁸ For example, New York Assemblyperson Linda Rosenthal championed legislation to protect the public from harm.²⁹ Commercial owners of some large cat species, including white tigers, may not allow members of the public to come into contact

²⁵ Michael Harthorne, "Libido-Less White Tiger Frustrates Zoo, Lady Tiger," *Newswr*, August 11, 2015. *Available at* www.newswr.com/story/211165/libido-less-white-tiger-frustrates-zoo-lady-tiger.html

²⁶ Environmental Conservation Law, N.Y. ENV § 11-0538 (Consol. 2018).

²⁷ CARMEN M. CUSACK, *PORNOGRAPHY AND THE CRIMINAL JUSTICE SYSTEM* (2014).

²⁸ *Id.*

²⁹ *Id.* citing Animal Welfare Act, 7 U.S.C. §§ 2132 – 2134 (2015).

with animals at any age.³⁰ White tiger cubs have been asked to sit for photo opportunities with humans, who are underserving, due to lack of training and compassion. “Though the photos may be cute and the animals may look sweet and fluffy, they are dangerous wild animals capable of serious violence, and the public should not be permitted to come into such close contact with them” irrespective of how small they may be.³¹ This bill sets forth protection for vulnerable cubs residing in commercial operations, including nonprofits.³² It does not extend to noncommercial, private owners.³³ Cub petting has been alleged to correlate with surplus captive white tigers; however, dwindling numbers prove otherwise.³⁴ Yet, some welfarists have

³⁰ N.Y. § 11-0538 (2018).

³¹ Kayla Ruble, “New York Passes Bill That Could Limit Selfies with Tigers,” *Vice*, June 24, 2014. *Available at* https://news.vice.com/en_us/article/59a43d/new-york-passes-bill-that-could-limit-selfies-with-tigers

³² Carson Barylak, “New York’s Big Cat Handling Ban Awaits Governor Cuomo’s Signature,” *International Fund for Animal Welfare*, August 6, 2014. *Available at* <https://www.ifaw.org/united-states/news/new-york’s-big-cat-handling-ban-awaits-governor-cuomos-signature>

³³ *Id.*

³⁴ *See* Mukesh Ranjan, “White Tiger Soon to Replace Ostriches at Ranchi Zoo,” *THE NEW INDIAN EXPRESS*, June 22, 2018. *Available at*

advantageously described petting operations to assimilate the opposition into anti-proliferation campaigns.³⁵

C. Breeding

Animal welfare agencies and captors occasionally embellish the negative consequences experienced by animals.³⁶ Some may “employ a touch of poetic license in crafting this narrative,” and yet others may cooperate with cub petting operations despite their public opposition to them.³⁷ One

www.newindianexpress.com/nation/2018/jun/22/white-tiger-soon-to-replace-ostriches-at-ranchi-zoo-1831923.html. The controversy of fictional abundance and demand for the scare has been acknowledged worldwide by artists, activists, and others; and yet, unbecoming or inappropriate fictional depictions of stuffed, skinned, and beheaded tigers persistently appear. *See e.g.*, Nico Santos, *CRAZY RICH ASIANS* (2018). This is similar to sexual objectification of white tigers in blogs describing sexual oppression. Due to their status as a god throughout the world this speech is hateful, and may not merit protection. CUSACK, *MUTATED SYMBOLS IN LAW AND POP CULTURE*. It is obviously inflammatory and defames those presently without standing. A correlation and caution may be evident in words such as “mounted.”

³⁵ *White Tigers Descended from 30 Founder Tigers*, WHITE TIGERS – THE TRUTH (2017). Available at <https://whitetigertruths.wordpress.com/facts/white-tigers-descended-from-30-founder-tigers/>

³⁶ *See e.g.*, *infra* note.

³⁷ Sea Shepherds described Lolita in captivity to the court and acknowledged fictionalizations. Nicholas A. Fromherz, *The*

overblown claim is that cubs may be born with anomalies due to inbreeding, and therefore white tigers should be deprived of mating lifestyles.³⁸ Likelihood of birth defects cannot justify depriving animals of sexual contact, company, or comfort.³⁹ First, inbreeding in humans is unlikely to produce alleged anomalies, but may not benefit the majority of society's members.⁴⁰ However, research on medical intervention for alleged increases in birth defects affecting offspring from intrafamilial unions

Endangered Species Act as Applied to Captive Animals: Sea Shepherd Legal's Amicus Brief in Peta v. Miami Seaquarium, 24 ANIMAL L. 277 (2018).

³⁸ *White Tigers Descended from 30 Founder Tigers*. Available at <https://whitetigertruths.wordpress.com/facts/white-tigers-descended-from-30-founder-tigers/>

³⁹ Likelihood (i.e., odds) is a theoretical concept and legal doctrine. In statistical analysis it may explain the relationship between two phenomena. Researchers may postulate that correlations are not as predictable when they randomly occur. A researcher will set a threshold at which a correlation may be said to have been demonstrated. Probability (e.g., substantial likelihood and probable cause) does not express the value of one white tiger. Therefore, breeding should not be restricted. One explanation for proclivity to choose mates from one or two shared parents may be inability to identify siblings as adults; and another is that maturation changes the individual. Sexual desire may correlate with circumstantial delimitations, not natural predilection for inbreeding in some situations.

⁴⁰ *Supra* note. "Bradford Study Finds Higher Birth Defect Risk in Married Cousins," British Broadcasting Corporation, July 4, 2013. Available at <https://www.bbc.com/news/uk-england-leeds-23183102>

may benefit the human population due to widespread acceptance of intrafamilial unions.⁴¹ Benefits of these unions need not be researched because they may be evident within the populations.⁴²

The social custom of consanguineous marriage is deeply entrenched in parts of the world and accepted by a minimum 20 percent of the world's population....As a consequence, at least 8.4 percent of the world's children have related parents. Consanguineous marriage is especially common throughout the Eastern Mediterranean, North Africa and the Indian sub continent, where 25-70 percent of unions involve related family members. The practice is also accepted in South America and parts of sub-Saharan Africa.⁴³

Increases in perceived anomalies, including nonnormative socialization, may be studied to

⁴¹ Christianson, Howson, & Modell, MARCH OF DIMES BIRTH DEFECT FOUNDATION.

⁴² *Id.*

⁴³ Arnold Christianson, Christopher P. Howson, & Bernadette Modell, *Global Report on Birth Defects*, MARCH OF DIMES BIRTH DEFECT FOUNDATION (2006). Available at <https://www.marchofdimes.org/materials/global-report-on-birth-defects-the-hidden-toll-of-dying-and-disabled-children-full-report.pdf>

promote diversity and possibly to foster cultural bridges.⁴⁴ Similarly, misinformation about genetic inbreeding of white tigers in a given region (e.g., United States) suggests that immigration of white tigers from India or other regions may be welcomed to encapsulate genetic diversity.⁴⁵ Second, white tigers are not inbred, for the most part.⁴⁶ Archival research has proven that present-day “white tigers descended from 30 founder tigers.”⁴⁷ Furthermore, cubs may be mixed and generic white tigers, who are not inbred.⁴⁸

Third, many white tigers are socially diverse.⁴⁹ The cougar is an exemplar of social engineering, which occurs in restricted communities (e.g., zoos)

⁴⁴ *Id.*

⁴⁵ CUSACK, MUTATED SYMBOLS IN LAW AND POP CULTURE.

⁴⁶ *Infra* note.

⁴⁷ *White Tigers Descended from 30 Founder Tigers* (2017). Available at <https://whitetigertruths.wordpress.com/facts/white-tigers-descended-from-30-founder-tigers/>

⁴⁸ *Golden Tabby and Snow White Tigers*, WHITE TIGERS – THE TRUTH. Available at <https://whitetigertruths.wordpress.com/facts/golden-tabby-and-snow-white-tigers/>

⁴⁹ Christian Kies, Siegfried and Roy Secret Garden - Baby white tiger, Youtube.com, October 30, 2015. Available at <https://www.bing.com/videos/search?q=secret+garden+white+tiger&view=detail&mid=BA6D3E879BF9CA1B3E3EBA6D3E879BF9CA1B3E3E&FORM=VIRE>

and natural terrains (e.g., forests). “A new study now shows that, contrary to popular belief, cougars have quietly built for themselves” status as “one of the Americas’ most iconic big cats.”⁵⁰ A “team’s discovery” was culminated using a “camera network,” which “wasn’t looking for signs of mountain-lion society.”⁵¹ The group of humans uncovered that mountain lions share resources and social times. One video showed friendship, including food-sharing. “This generous act was no mere fluke; the pair of cougars stayed in each other’s company for a full day and a half. And as later genetic data showed, they weren’t related to one another.”⁵² “In effect, [the]...camera had captured the first cougar friendship known to science.”⁵³ Some animals believed by science to be related may be genetically diverse and unrelated. Tests may be

⁵⁰ Michael Greshko, *Once Thought Loners, Cougars Revealed to Have Rich Society*, NATIONAL GEOGRAPHIC, October 17, 2017. Available at <https://news.nationalgeographic.com/2017/10/pumas-mountain-lions-cougars-society-social-cats-animals/>

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.*

flawed.⁵⁴ Animals may hide genetic relationships; and zookeepers may promote survival by under-identifying genetic diversity (i.e., numerosity).⁵⁵

Fourth, many humans are born with birth defects and minor ailments, which can be repaired and amended.⁵⁶ Twenty percent of teenagers experience mental health disorders.⁵⁷ More than ten percent of minors have mood disorders; and ten percent experience conduct disorders.⁵⁸ Eight percent have anxiety.⁵⁹ Delinquents have a 70% chance of experiencing mental illness.⁶⁰ Among minors between ten and 24 years-old, suicide is the third likeliest cause of death.⁶¹ Of those who commit

⁵⁴ CARMEN M. CUSACK, *TWINS AND DEVIANCE* (2016).

⁵⁵ Siegfried and Roy Secret Garden - Baby white tiger. *Available at* <https://www.bing.com/videos/search?q=secret+garden+white+tiger&view=detail&mid=BA6D3E879BF9CA1B3E3EBA6D3E879BF9CA1B3E3E&FORM=VIRE>

⁵⁶ Carmen M. Cusack, *Spectacles: Sight and Education*, 5 JOJ OPHTHALMOLOGY (2018).

⁵⁷ National Alliance on Mental Illness (NAMI). "Mental Health Facts Children & Teens." *Available at* <https://www.nami.org/getattachment/Learn-More/Mental-Health-by-the-Numbers/childrenmhfacts.pdf>

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.*

suicide, 90% suffer mental illness.⁶² Of minors between the ages of six to 11, 18.4% are obese; and in approximately the same age group, 16% are not in “excellent or very good health.”⁶³ In the United States, autism diagnosis has increased 15% since 2012; and in local regions increases have been greater, for example 20% in New Jersey.⁶⁴

Congenital anomalies, injuries, and non-communicable diseases (chronic respiratory diseases, acquired heart diseases, childhood cancers, diabetes, and obesity) are the emerging priorities in the global child health agenda. Congenital anomalies affect an estimated 1 in 33 infants, resulting in 3.2 million children with disabilities related to birth defects every year. The global disease burden due to non-communicable diseases affecting children in childhood and later in life is rapidly increasing, even

⁶² *Id.*

⁶³ Centers for Disease Control & Prevention (CDC). “Child Health.” Available at <https://www.cdc.gov/nchs/fastats/child-health.htm>

⁶⁴ Autism Speaks, “CDC Increases Estimate of Autism’s Prevalence by 15 Percent, to 1 in 59 Children, Centers for Disease Control & Prevention, April 26, 2018. Available at <https://www.autismspeaks.org/science-news/cdc-increases-estimate-autisms-prevalence-15-percent-1-59-children>

though many of the risk factors can be prevented.

Similarly, the worldwide number of overweight children increased from an estimated 31 million in 2000 to 42 million in 2015, including in countries with a high prevalence of childhood undernutrition.⁶⁵

Studies show that one in four human children experiences vision impairments that require corrective devices.⁶⁶ White tigers and yellow tigers may have defects according to the Association of Zoos & Aquariums (AZA), however each individual is 100% in conformity and present in the world.⁶⁷

⁶⁵ "Children: reducing mortality," World Health Organization (WHO). Available at <https://www.who.int/news-room/factsheets/detail/children-reducing-mortality>

⁶⁶ Ashley Danchuk, "New Report: Kids' X Parents = 25% of Children Using Vision Correction," Vision Monday, August 27, 2012. Available at www.visionmonday.com/article/new-report-kids-x-parents-25-of-children-using-vision-correction/; "Vision Facts and Statistics," Medical Eyes Services Vision. Available at https://www.mesvision.com/includes/pdf_Broker/MESVision%20Facts%20and%20Statistics.pdf; Cusack, *Spectacles: Sight and Education*.

⁶⁷ John Davis & Colleen Lynch, *Population Analysis & Breeding and Transfer Plan*, ASSOCIATION OF ZOOS & AQUARIUMS, October 2, 2014. Available at <https://ams.aza.org/iweb/upload/Hippopotamus%20River%20%20Yellow%20SSP%202014%20Final-68e3948d.pdf>

The sum of his or her parts are even greater when calculated as a whole being. Educational and conservation value cannot be diminished by anomalies because they may represent beings in the wild. There is hardly any evidence to suggest that wild white tigers would have fewer birth defects and anomalies or alternate diversity measures. Problems are relative, not actual. For example, humans' lives may be labeled as being problematic and unideal (e.g., stillborn, adoption, abortion, and delinquency).

Fifth, white tigers have a society that surpasses physical contact.⁶⁸ Awareness of dwindling numbers in the United States may dampen their spirits and discomfort them psychosocially.⁶⁹ They may need for others to remain sexually active to promote well-being.⁷⁰ Therefore, keeping white tigers apart is cruel because it demoralizes the existing members of their union.⁷¹

⁶⁸ Greshko, *Once Thought Loners, Cougars Revealed to Have Rich Society*.

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ White tigers may switch owners, but remain a family, for example, when pigeon caretaker, Mike Tyson, the former Heavyweight Champion, rehomed his white tigers. S.A. Rogers, "Mike Tyson's

III. FINDINGS AND ANALYSIS: WHITE TIGERS' VS. YELLOW TIGERS' MATING BEHAVIOR

In this study, pairs of white tigers, pairs of yellow tigers, and yellow tiger and white tiger pairs were observed. Videos were randomized by Youtube.com. Mating behavior was identified as mounting and immediately contiguous contact and interactions. Twelve videos depicted yellow tigers engaging in mating behavior with white tigers. Sixteen videos showed yellow tigers mating and nine documented white tiger pairs. Humans may have greater interest in filming or displaying videos depicting yellow tigers; or there may be greater numbers of yellow tigers available to the public. Evidence abundantly demonstrates that white tigers share captive spaces with yellow tigers. However, this research found

Tiger Removed from Indiana Tattoo Parlor," MNN, May 29, 2010. Available at <https://www.mnn.com/earth-matters/animals/stories/mike-tysons-tiger-removed-from-indiana-tattoo-parlor>

differences in their behaviors to prove that many may prefer to live with others, who are like them.

Data was recorded of the number of attempts to mate displayed in each video. Some videos played several segments involving the same animals. Attempts may not have followed closely chronologically. Though settings and conditions (e.g., weather and lighting) suggested that videos were recorded in close temporal proximity. Nine attempts were made by white tiger pairs. Twenty six attempts were documented of yellow tiger pairs. Eight attempts were documented involving female yellow tigers and male white tigers. Seven attempts between male yellow tigers and female white tigers were recorded. Gender was inferred by sex behavior. Males were generally presumed to mount while females were mounted.

Mating behavior was distinct. The following is a list of recorded behaviors:

1. Aggressive. Swatting, turning and snapping, possibly in conjunction with satisfaction.

2. Civil. Laying still, usually lasting longer than a few seconds. Distinct from jumping and aggressive behavior.
3. Jumping off. Jumping back. Jumping away may be defensive, aggressive, or refreshing.
4. Backing off
5. Interacting with others. Growling or smiling at humans.
6. Chasing
7. Cuddling
8. Licking
9. Springing forward

One additional behavior was anticipated based on observation of large cats; however, neither white tigers nor yellow tigers exhibited it.

Important findings were made. Female yellow tigers were likeliest to behave aggressively. No male white tigers swatted, turned aggressively, or snapped. Female white tigers with male white tiger partners were slightly more likely to behave aggressively than with yellow male partners. In 44% of segments, female white tigers demonstrated

aggressive behavior with white tiger partners, but only 43% did with yellow partners. Therefore, this behavior did not change. Male swatting was not an atypical response to female swatting. Males were less likely to instigate swatting bouts. Male yellow tigers behaved aggressively in 23% of sessions with yellow females. They only swatted, turned aggressively, or snapped in 14% of sessions with female white tigers. When mounted by male yellow tigers, female yellow tigers have a 65% chance of behaving aggressively, compared to a 38% chance with male white tigers. Aggression may relate to abstract impulses (e.g., impetuosity) or various motives, for example hypertension, sadistic arousal, high-powered feistiness, masculine displays, and autonomy. Forty four percent of white tiger couples were civil; and 27% of yellow tiger couples behaved civilly without any aggressive or defensive behavior. Male white tigers and female yellow tigers were civil toward one another in 38% of sessions. There was an 86% chance that female white tigers and male yellow tigers would behave civilly.

Nearly every video depicted sessions from mounting to dismounting. One popular method for discontinuing sexual contact was pouncing away from a partner. Jumping or pouncing from a partner was commonly high-energy and sudden. Sessions typically lasted a few seconds or a minute. Jumping often ended attempts to mate, but often was preceded by or possibly occurred in response to female swatting, turning, and snapping. Soft growling was normal, and often accompanied aggressive swatting. Jumping potentially related to nonpenetration, withdrawal, or culmination. Culmination may not have been key to erotic stimulation, which may be important in captivity. Thirty three percent of male white tigers jumped off or jumped away in a backward motion. Female white tigers did not jump from male white tigers. Forty two percent of male yellow tigers jumped in a manner that appeared to be aggressive, defensive, or refreshing. Only four percent of female yellow tigers jumped. Therefore, yellow tigers were likelier to jump, and male yellow tigers were likeliest. With yellow females, male

yellow tigers jumped off after 13% of attempts. Female yellow tigers did not jump aggressively with male white tigers. When paired in a mixed relationship, neither male yellow tigers nor female white tigers jumped from contact. White tigers were also less likely than yellow tigers to back off. Some unstraddled partners. Among male white tigers mating with female white tigers, 11% backed off. No female white tigers backed off. Between yellow pairs, 19% of males and four percent of females backed off. In mixed couples, 50% of male white tigers backed off, and 14% of yellow males backed off. Neither female yellow tigers or female white tigers backed off in mixed arrangements. In crossbreeding situations, male white tigers were by far the likeliest to back off. Backing off could have many contexts including disanimation, feeling impasse, boredom, disgust, or mannered behavior. Springing forward is a variety of behaviors succinctly described as expression. Feelings expressed could include alarm, disinterest, skepticism, bewilderment, orneriness, being

overcome (e.g., great joy), apathy, and fieriness. Eleven percent of female white tigers sprang forward after being mounted by male white tigers; and 25% of yellow females sprang forward while with male white tigers. Males did not spring and yellow females were more than twice as likely to spring.

Affection between similar and mixed couples may have demonstrated these white tigers' and yellow tigers' desire for sexual affection. None of the animals chased except female white tigers coupled with male white tigers. Female white tigers chased in 44% of scenes. Therefore, female white tigers behave differently than yellow tigers, and need requisite attention and comfort provided by zoos and other keepers to meet their needs. All types of couples cuddled except female white tigers with male yellow tigers. White tiger couples cuddled 22% of the time and yellow tiger couples cuddled at approximately the same rate, 23%. Therefore, yellow tigers and white tigers in captivity may cuddle at consistent rates. However, a mixed couple involving a male white tiger and female yellow tiger were half

as likely to cuddle, 13%. Male white tigers were likeliest to lick female white tigers, 11%. Male yellow tigers were also unlikely to lick female yellow tigers, four percent. No other instances of licking were recorded. Licking may signify helpfulness, kindness, gentleness, or a cleanliness function.

Attention from and to others was documented. Male white tigers mating with female white tigers interacted with or paid attention to humans or animals in 11% of segments. Female yellow tigers did so at a lower rate, four percent, when paired with male yellow tigers, who interacted with others (e.g., growling at a crowd) eight percent of the time. Female yellow tigers interacted with others, including humans, while mating with white tigers in 13% of video segments. In mixed relationships, no white tigers or male yellow tigers paid attention to others. In at least one video, multiparty intimacy and sexuality were evident. Explanations may include entertainment, voyeuristic satisfaction, performance, bystander sexual arousal, usurpation, keeping guard, and good taste (e.g., wingman). While a yellow

female and male white tiger sexually connected, another yellow tiger and another white tiger were present in the same space. Two white tigers partook in mating behaviors in the company of a yellow tiger, who appeared to be male. The yellow male interrupted, antagonized, annoyed, or spurned the male white tiger. Immediately after humping, the males boxed or sparred while vertically presented. A zookeeper may have purposefully or randomly opened the cage door. The white tiger and yellow tiger met with him at door. A video documented three white tigers, possibly two males and one female. One male was licking a female's back. The third white tiger mounted the back of the white tiger, who was being licked. The first white tiger politely stood by and looked in the other direction. In another video, a yellow tiger, possibly a female, watched. The video may have depicted two female yellow tigers engaging in mating-type behavior for erotic satisfaction, levity, sexual entertainment, or other purposes. The mounted tiger released unique high-pitch squealing and hissing. Gender possibly seems

to be a result of environmental factors, such as pairing in captivity. Yet, many animals exhibit homosexual tendencies or activities beginning shortly after birth.⁷² Therefore, it may be presumed that some wild tigers and white tigers may experience intrinsic behaviors and perspectives and environmental conditions that lend to homoerotic companionship. They may reverse traditional norms and flout gender roles; for example, one female yellow tiger humped a male white tiger.

IV. CONCLUSION

White tigers may be comfortable with a sexual companion in captivity. Their behavior differs from yellow tigers, who may be more aggressive. Accommodations should be specific to individuals in consideration of this data as it explicates differences in culture and conduct. Some white tigers are related to yellow and mixed animals. Yellow tigers and white tigers may have mixed parents. They may be

⁷² CARMEN M. CUSACK, ANIMALS, DEVIANCE, & SEX (2015).

golden white tigers known as Tabbies or Strawberries. For example, one video was not analyzed because the posterior extremities appeared to pertain to a white tiger while the front limbs and torso resembled a yellow tiger. Families may enjoy mixed company; and gender may lend itself to limited availability of same-sex entertainment and arousal. Education for caretakers and the public should incorporate these findings to increase awareness and facilitate *in situ* preservation and remediation for encroaching human conduct. Cub petting is an impermissible activity. This study should fortify caretakers' position against industry violations of captive families. Like all species, white tigers are sensitive to discomfort, speciesism, and unnatural habitation. Therefore, it is necessary to implement rules appropriately to care for them and all creatures.