One of the most important features of science is that major discoveries regularly raise important ethical questions. This is especially true with research about cetaceans, because the discoveries of marine mammal scientists over the last 50 years have made it clear that whales and dolphins share traits once believed to be unique to humans: self-awareness, abstract thought, the ability to solve problems by planning ahead, understanding such linguistically sophisticated concepts as syntax, and the formation of cultural communities (Herman, 1984; Norris et al., 1991; Reiss & Marino, 2001).

Accordingly, humanity faces a number of profound questions: What are the ethical implications of the fact that whales and dolphins demonstrate such intellectual and emotional sophistication? Which ethical standards should be used in evaluating how humans treat them? When looked at through this lens, which human behaviors are ethically problematic? How do we change our behavior to improve the situation?

Engaging with these questions, however, poses a special challenge for marine mammal scientists. The scientific disciplines employ methodologies that emphasize the careful collection, cataloging and description of empirical data. By contrast, ethical considerations are essentially conceptual and normative. Ethical analyses begin with the facts related to the actions under investigation, but the primary point of an ethical analysis is to conclude what those facts tell us about the ethical acceptability or unacceptability of the actions under investigation.

The fundamental challenge for marine mammal scientists who want to explore the ethical implications of what marine mammal science has discovered about whales and dolphins is to move from the description of facts about whales and dolphins to the evaluation of what those facts say about human behavior towards these cetaceans. A simple way of putting this is that the task is to move from is to ought — that is, to move from what we know about various cognitive and affective
capacities of whales and dolphins and the impact of human actions on these beings (what is the case) to a conclusion about whether or not such actions are ethically acceptable, that is, whether or not humans should behave towards these cetaceans in this fashion (what ought to be the case). This entails becoming familiar with the philosophical literature regarding ethics, in general, and environmental ethics, in particular, and to acquire the appropriate technical skills and intellectual perspective for engaging in conceptual discussion and analysis.

This essay aims to serve as a brief introduction to ethics for marine mammal scientists interested in discussing the moral status of such practices as: dolphin drive hunts; commercial or scientific whaling; the deliberate or preventable harm to cetaceans resulting from certain human fishing practices; the use of captive cetaceans for entertainment, education, military purposes, therapy for human medical conditions or scientific research. This piece will begin by explaining the basic elements and appropriate procedure for an ethical analysis (such fundamental ideas as moral standing, moral rights and flourishing) and briefly describe their application to ethical issues connected with human treatment of whales and dolphins.

What is ethics?

Ethics is one of a host of ways we use to evaluate human actions. Non-ethical evaluations include whether or not an action is: legal; profitable; aesthetically pleasing; well-executed; novel; humorous; consistent with the rules of a particular activity (e.g., baseball or chess); in agreement with the traditions of a particular group (sorority, village, community, religion); and the like. The number of non-ethical perspectives we use to evaluate actions is almost limitless.

Despite the many differences that may surface among philosophers in debates about ethics, there is a consensus that, at the very least, ethical judgments do not rest on standards which might be subjective, arbitrary, irrational, contradictory or internally inconsistent (e.g., law, religion, social or cultural norms or traditions, individual conscience or emotions). The goal is to base ethical judgments on objective standards with, as much as possible, universal validity.

Accordingly, the most basic goal of an ethical evaluation can be seen as determining whether or not the action in question is consistent with the well-being of those affected by that
action. Does it increase or decrease their ability to live a successful life? Does it support or restrict their growth and development? Does it promote or undermine their key interests?

Given the complexities of the practical world, it is, of course, regularly the case that an action will promote the interest of one group at the expense of another. Hence, the classic ethical dilemmas: Do we have reason to favor one group over the other? Is the best solution one in which each group must compromise? How important is the amount or type of good or harm produced? Are some harms or actions never ethically defensible?

Moral standing

The first step in determining the ethical character of an action or resolving ethical dilemmas is to determine whether all of the parties involved have moral standing. Put prosaically, “Who ‘counts’?” Whose interests deserve to be taken into account? Who can be harmed or benefited in an ethically significant way?

Traditionally, only some animals have been seen as having a claim for moral standing. (The capacity of animals to feel pain and their vulnerability to be killed are typically seen as sufficient conditions to grant moral standing.) However, thinkers such as Christopher Stone have raised the possibility of a more expansive understanding of the concept with his provocative essay, “Do Trees Have Standing?” (Stone, 1972).

Fortunately, the most pressing ethical issues involving whales and dolphins center on a clash between humans and cetaceans. And since both groups have sophisticated intellectual and emotional abilities that make them vulnerable to a wide range of benefits and harms, there should be no question that both groups have moral standing.

Having moral standing, we might say, gets a biological Family, Order or Species only “in the door.” It does not mean that all beings with moral standing deserve the same protections. For example, publicly shaming an innocent human for serious wrongdoing that he or she did not do could lead to substantial harm to that individual. But it is difficult to believe that verbally abusing a cow in the same way would compromise the well-being of that mammal. Accordingly, the capacities, needs and traits of a species will determine the type of consideration any member of
that species should be entitled to. (The relevant features of whales and dolphins will be discussed below.)

The issue of moral standing also raises the question of whether it should extend to a group or to individuals. The risk of extinction, for example, may entitle a species to moral standing, but this does not necessarily extend to individual members of that species. If an identifiable population or community is threatened, but not the species, members of this community may enjoy moral standing – but only in their capacity as members of this specific group.

All individual humans, of course, are seen as having moral standing. The special combination of advanced cognitive and affective capacities which distinguishes us creates a uniqueness for each individual which we see as having intrinsic value. These capacities also produce a distinctive vulnerability to pain and suffering. Because humans experience life as self-aware individuals with sophisticated intellectual and emotional abilities (the capacity to plan and control behavior, to form significant emotional relationships, to recall past events and the like), we are vulnerable to a greater range of harms than beings who lack these abilities. We can suffer from not simply physical pain, but complex emotional pain such as traumatic memories, fear in the present, dread regarding the future, etc.

Discussions about the welfare of whales and dolphins have traditionally been limited to whether or not a species is threatened with extinction, a specific population is threatened, etc. From this perspective, groups of cetaceans, not individuals, have moral standing. However, research that demonstrates advanced cognitive abilities among dolphins – particularly, self-awareness (Reiss & Marino, 2001) – offers evidence for the claim that individual cetaceans should be regarded as having moral standing. Self-awareness makes possible a sense of self-identify and creates the individual uniqueness humans prize so highly in ourselves. The rich inner world resulting from a combination of self-awareness, sophisticated intellectual and emotional abilities carries with it a significant vulnerability to affective as well as physical harm which parallels that risk among individual humans.

It is critical to recognize that if individual whales and dolphins are recognized as having moral standing on the basis of key traits they share with humans (self-awareness, ability to control their actions, intellectual and emotional abilities advanced enough to produce a rich inner life that
includes associated vulnerabilities), in an ethical dispute, our respective species would appear to have equal moral standing.

**Ethical standards**

Having identified who is entitled to moral standing, the next question is which standard should be applied. What should determine the ethical character of the action under question? In the case of a clash of interests, what is the most ethically appropriate resolution to such a conflict?

In the two thousand year history of ethics, the two most important competing standards come from “teleological” and “deontological” approaches to ethics.

- **Teleological.** A “teleological” approach argues that all actions are morally neutral, and that their ethical character is determined by the consequences of the actions. The most well-known example is the utilitarianism of Jeremy Bentham and John Stuart Mill. In his *Introduction to the Principles of Morals and Legislation*, Bentham (1789) writes, “Nature has placed mankind under the governance of two sovereign masters, pain and pleasure. It is for them alone to point out what we ought to do. ... [T]he standard of right and wrong. . . [is] fastened to their throne. . . . By utility is meant that property in any object whereby it tends to produce benefit, advantage, pleasure, good, or happiness (all this in the present case comes to the same thing) or (what comes again to the same thing) to prevent the happening of mischief, pain, evil, or unhappiness to the party whose interest is considered: if that party be the community in general, then the happiness of the community: if a particular individual, then the happiness of that individual.” (I. 1-3).

This approach regularly surfaces as “cost benefit analysis” in contemporary economic and political discussions and is embraced by many as a practical and commonsense ethical standard. If the benefits outweigh the costs, the action or policy is good. When viewed from a democratic perspective, this approach often endorses actions which benefit the majority over the minority.

- **Deontological.** A second perspective rejects the importance of consequences and argues that actions have intrinsic moral properties. Such a “deontological”
perspective is best represented by Immanuel Kant (1785), who writes: “[E]verything has either a price or a dignity. Whatever has a price can be replaced by something else as its equivalent; on the other hand, whatever is above all price, and therefore admits of no equivalent, has a dignity. . . . Skill and diligence in work have a market value; . . . but fidelity in promises and benevolence on principle. . . have intrinsic worth” (434). Kant’s central moral principle is the “categorical imperative”: “Act in such a way that you treat humanity, whether in your own person or in the person of any other, always at the same time as an end and never simply as a means” (429).

This approach offsets the weakness of utilitarianism, which can produce calculations that justify ethically problematic actions because of the tangible benefits they produce. Our repudiation of slavery, human experimentation and the like are classic cases where the very action (treating persons as property or in some other way showing no respect for the dignity of the human person) is considered so morally offensive that any tangible benefits that may result are considered irrelevant.

Despite the robust disagreements among ethical theorists about which of these approaches is correct, in the more practical domain of applied ethics, a more productive approach uses both perspectives. (A deontological approach corrects for the risk of utilitarianism producing situations where “the ends justify the means.” A teleological approach — with its focus on particular situations — softens the moral rigidity and narrow focus that can come from examining only the actions involved.) Each can serve as, we might say, a lens which reveals different features of the ethical issue at hand or the actions being evaluated.

Such a practical, eclectic approach gives two major strengths to any ethical analysis. First, it allows us to identify the most fundamental issues in any ethical analysis:

- When we look at the consequences of any actions under question, is anyone with moral standing harmed?
- Are these harms offset by an appropriate amount and/or type of benefits?
• Setting the consequences aside and examining the actions themselves, do they treat all parties appropriately, that is, in a way that is consistent with the respect and dignity they are due? Are any of the actions so ethically indefensible that this trumps the tangible benefits?

Second, combining both teleological and deontological approaches creates a more objective, complete and stricter ethical standard than either perspective alone. It also derails the temptation to select one’s ethical perspective according to whatever will advance one’s personal interest. Therefore, in order for either an action under study or a resolution of a clash between parties to be ethically defensible, it must be the case that there is both a proper mix of benefits versus harms and that all parties are treated appropriately.

_Ethical standards, humans, cetaceans and flourishing_

Given the difficulties of resolving ethical disputes among humans or determining the ethical character of actions done by different individuals, for different reasons in different circumstances, it is obvious that the apparent simplicity of these three questions belies the complexities connected with most ethical issues. It should be no surprise, then, that when we inject different species into the mix — both profoundly similar to and fundamentally different from humans — ethical discussions become geometrically much more complex. And one of the most important challenges is how to conduct such an inquiry in a neutral, objective way so that we do not — even unconsciously — tilt the analysis in a direction that automatically favors one species over the other.

Accordingly, the best approach should be _species specific_ and grounded as much as possible in facts. For the purposes of this introduction to ethics, then, the concepts of the “flourishing” of a being (and its relationship to the concept of _moral rights_) form an appropriate foundation for an ethical standard.

The most important thinker representing this perspective is Martha Nussbaum (2006), who advances a “capabilities approach” to animal ethics. Reflecting a deontological perspective, Nussbaum (2011) takes as “a fundamental ethical starting point . . . that we must respect each individual sentient being as an end in itself, not a mere means to the ends of others” (p. 237). But
the more tangible part of her theory is the idea that “each creature has a characteristic set of capabilities, or capacities for functioning, distinctive of that species, and that those more rudimentary capacities need support from the material and social environment if the animal is to flourish in its characteristic way” (ibid., italics added).

The assumption underlying this perspective is that animals have evolved in such a way that a certain set of conditions must be met in order for them to be able to grow, develop and acquire the traits, skills and dispositions necessary to have a satisfying and successful life as a member of that species. The environment in which a species evolved, the challenges it faced, the resulting adaptations and the features that came to distinguish it determined these conditions.

For example, in order for humans to flourish, we require: physical and emotional health and safety; absence of pain and suffering; protection when we’re young and infirm; freedom of choice, equality, justice, etc.; treatment consistent with appropriate respect for our dignity as autonomous individuals; opportunity to learn what we need to know in order to navigate a social group’s culture; access to meaningful emotional relationships; and rest.

It is, of course, possible for humans to tolerate situations which lack many of these conditions. However, we do not flourish in such circumstances. Because of the nature of the cloth from which we’re cut, a life characterized by, for example, being prevented from acquiring the skills necessary to make a living, being discriminated against, enslaved or prevented from having meaningful relationships would be unsatisfying at a deep and fundamental level. No human in these circumstances could develop the sense of autonomy, safety and control which would let them feel they can have a successful and satisfying life.

Indeed, the conditions for flourishing are so important to humans that we enshrine them as rights — specifically, human rights. (These are moral rights, which proceed from our mere membership in the species, as opposed to legal rights or political rights which require some sort of action by some outside party.) The best known statement is the United Nations’ Declaration of Human Rights. This is essentially a list of what any member of our species would categorically need in order to have the possibility of living a successful and satisfying life. That is, we say that humans have a right to these conditions because we need them in order to flourish.
The conditions necessary for flourishing, then, actually become the foundation of ethics. That is, from this perspective, to say that an action is ethically positive is to say that it promotes the flourishing of those involved. To say that an action is ethically negative is to say that it prevents or undermines it. Ethical disputes, then, are understood most simply as clashes over competing basic needs in situations where there is no obvious way for all involved to have them met — at least not in the way competing individuals initially desire.

In an ethical clash between human and cetacean interests, then, a fundamental question is: What are the conditions for cetacean flourishing?

For the purposes of this essay, the most significant attempt to detail these conditions is the “Declaration of Rights for Cetaceans: Whales and Dolphins” (Brakes & Simmonds, 2011). In this document, the conditions identified as necessary for whales and dolphins to flourish include: life; freedom of movement and residence within their natural environment; freedom from cruel treatment, removal from their natural environment or being treated as property; and cultures free of disruption.

This perspective is supported by what has been learned about cetacean intellectual, emotional and social sophistication in the last half-century’s research. These discoveries feature: self-awareness (Reiss & Marino, 2001); the structural sophistication of the dolphin brain (Marino, 1995, 2002; Morgane et al., 1986); the ability to understand artificial human languages, “representations of reality” and human “pointing” and “gazing” behavior (Herman1984; Herman et al., 1984, 1989, 1993, 1999); dolphins’ abilities to plan (Gory & Kuczaj, 1999); and cetacean social intelligence (Connor & Peterson, 1994; Herzing, 2000, 2011; Norris, 1991; Norris et al., 1991; Smolker, 2001 and Reynolds et al., 2000). Especially important are the discoveries of cetacean culture (Rendell & Whitehead, 2001). Particularly significant in this regard are: the ongoing studies of the Pacific Northwest orcas by a variety of scientists; Denise Herzing’s long-term research on Atlantic spotted dolphins (Herzing, 2011), and Hal Whitehead’s work on culture in sperm whales (Whitehead, 2011).
As in the case of human rights, cetacean rights refers to moral (not legal) rights. Similarly, as Nussbaum argued above, the ethical requirements include both the material conditions that have to be met for whales or dolphins to grow and develop in a way that gives them a reasonable opportunity to live satisfying and successful lives and being treated with appropriate respect for their dignity as individuals with moral standing. Like humans, cetaceans can be harmed not only by physical abuse, but by treatment inconsistent with their dignity.

Examination of the list of cetacean rights asserted in the Declaration reveals the same duality noted above regarding the ethical constraints on human behavior towards whales and dolphins.

Respect for the intrinsic worth and dignity of individual cetaceans is reflected in prohibitions against treating them as property, constraining their movements, disrupting their cultures and removing them from a natural environment. These prohibitions are based on the idea that whales and dolphins have the capacity for free, autonomous behavior and that, as is the case with humans, any interference with someone’s free choice would be ethically unacceptable.

The possibility of tangible harm is referenced in the need for protection against cruel treatment and other actions that contain the risk of harm.

*Humans, whales, dolphins and ethics.*

In light of this discussion of moral standing, moral rights and the conditions needed for flourishing, the ethical character of some human treatment of whales and dolphins would appear ethically questionable.

Inasmuch as the first condition to be able to flourish is to be alive, the most problematic human practice would be the deliberate killing of whales and dolphins in drive hunts or in “scientific whaling,” and the preventable deaths and injuries of cetaceans produced by certain human fishing practices and military exercises.

The more debatable issue of captivity brings with it a series of questions.
First, is it possible for any captive facility to provide the conditions necessary for the flourishing of the whales and dolphin who live there? Seen from this perspective, the central issue is not the life span or even the physical condition of cetaceans in captivity. The basic question is whether captivity can provide the sort of stimulation needed for normal growth and development.

It is regularly argued that the tangible benefits of captivity — through entertainment, education and research — outweigh any harm. However, this claim must overcome the objection raised by the moral standing of whales and dolphins as individuals which implies that buying and selling cetaceans — or anything that amounts to treating them as property — would be intrinsically wrong.

Of course, the problem of captivity is complicated by the practical problem of what to do with the cetaceans currently captive, even if the facilities holding them agreed to release them. Some cetaceans might be able to trained to make the transition to living in the wild, but others might not. What is the best course of action in such a situation?

Implications for future research

Greater familiarity with normative traditions

As noted at the outset, this essay is firmly grounded in the idea that the ethical implications of the scientific research on whales and dolphins become evident only when viewed through the lens of such philosophical concepts as “moral standing,” “moral rights” and “flourishing.” One of the most important needs in future cetacean research, then, is for the descriptive methodology of science to be supplemented by perspectives from intellectual approaches that specialize in normative judgments. Future marine scientists must become as adept at ethical analysis as data analysis. They must acquire a thorough understanding of the methodology, intellectual perspectives and relevant literature of fields like philosophy and environmental ethics. Failure to do so will produce the disappointing situation of scientists not fully understanding the ethical dimensions of their own research. And this will obviously slow the pace of improving the treatment of cetaceans by humans.

Key areas for future inquiry
This essay has suggested that an appropriate standard for evaluating the ethical character of human treatment of whales and dolphins is the set of necessary conditions required for individual cetaceans to *flourish* in their natural habitat. Unfortunately, in comparison to the large amount we understand about what *humans* need in order to flourish and to experience a sense of well-being, we actually know much less about the necessary conditions for the growth and development of all facets — physical, emotional, social — of cetaceans. Given such ignorance, it is likely that various human behaviors currently harm whales and dolphins in ways that are both unintended and preventable. If whales and dolphins have the right to be protected from harm and to be treated with appropriate respect as individuals, this implies a duty on the part of researchers to orient their investigations in ways that advance the goal of raising the ethical character of human treatment of whales and dolphins.

*Greater importance of research in the wild*

The importance of the research that has been done on captive cetaceans in the past cannot be underestimated. However, the very effectiveness of this research raises the question of whether ongoing captive research is ethically defensible. In particular, what has been discovered about the cognitive and affective sophistication of dolphins calls into question the practice of treating them as property. More importantly, research in the wild, which has uncovered the social complexity of whales and dolphins and revealed the existence of cetacean cultures, raises the possibility that captive research could be irrelevant in establishing appropriate standards for the treatment of dolphins by humans. From an ethical perspective, field studies could provide more relevant results than research done in captivity for determining species-appropriate standards.

A variety of areas come to mind where specific research efforts in various disciplines could make significant contributions.

*Reducing harm to individuals*

- **Ship strikes**
  A significant number of whales are struck by vessels each year in virtually every ocean on the planet. There has already been substantial research in this area which has led to some progress in reducing the number of strikes. However, more work
in this area is needed — both in terms of understanding whale behavior that seems to increase their risk of being struck as well as possible technologies that could be used to warn them off.

- **Military sonar testing**
  Ongoing disputes about sonar testing by the military frequently involve claims and counterclaims about whether or not such tests harm cetaceans and, if so, how serious that harm is. While it would obviously be unethical to conduct research that would subject live cetacean test subjects to different types and levels of sonar in order to determine at what point they’re seriously harmed, ongoing research on whales that may have died as a result of such tests could yield important results that could be used to alter or stop such sonar testing.

- **Aboriginal whaling**
  The deaths of whales in connection with human aboriginal cultures is a particularly contentious issue because any objection to it can sound like cultural imperialism. At the same time, as is clear from the defense of human slavery as “our peculiar institution” used in the United States before the Civil War and long-standing and revered patterns of discrimination against women and non-whites in modern America, cultural traditions are not necessarily ethically defensible. While it seems unlikely that the research of marine scientists could affect these practices, this would be a fertile ground for anthropologists. Ideally, a better understanding of the cultural and economic factors that drive such practices could lead to discovering ways that the aboriginal communities involved might be willing to choose to end the practices without seriously compromising their cultural values or way of life.

**Reducing harm to groups**

- **Disruption of cetacean cultures**
  From an ethical perspective, research into the structure and dynamics of cetacean cultures — and their fragility — is unquestionably an important area for the future. As the case of North Atlantic right whales has shown, human actions can
unintentionally remove cultural knowledge from a cetacean community to such an extent that the long-term existence of the community is put at risk. (Whitehead et al, 2004). Hopefully, more research in this area will lower that risk. Central questions include: How is cultural information stored, retrieved and passed on from generation to generation? Do various whales in a community have distinct responsibilities in preserving certain knowledge critical to the welfare of the group? Can cultural information be transmitted from community to community? Which human behaviors disrupt critical cultural processes?

A Sanctuary for Dolphins

- An especially pressing ethical issue is that there is currently no appropriate home for dolphins who should be “retired” from military service or performing at entertainment facilities. If, in the future, captivity is banned in countries that currently allow it, the scale of the problem will increase. While sanctuaries for elephants, chimpanzees and other nonhuman animals exist, there are none for cetaceans. Research into every aspect of a cetacean sanctuary – possible locations, necessary conditions, financial support – is needed before one can actually be established.

Final remarks

By providing a brief overview of the elements of ethical analysis, this essay has attempted to demonstrate that a full understanding of the ethical issues related to the treatment of whales and dolphins by humans requires a multi-disciplinary approach – specifically, a methodology that integrates scientific findings with their philosophical implications.

It is important to recognize, however, that once the central questions in an ethical dilemma have been identified and all of the relevant evidence surveyed, the next step is to construct an argument that advances a specific position about the ethical character of the actions in question and attempts to defend that argument against likely objections.
It is beyond the scope of this essay to proceed to this next step, but the reader is welcome to consider extended arguments that I have offered for the idea that much human treatment of dolphins is ethically indefensible because dolphins are nonhuman persons (White, 1998, 2007, 2011, 2013).

REFERENCES


