# 1AC

### 1AC - Framing

**Conflicting ethical viewpoints does not require the inevitable exclusion of one over another but rather the acceptance that both could be relevant and valuable ethical tools. Thus, the meta ethic should be moral pluralism. Prefer-**

#### 1. Empirics- Best studies prove pluralistic tendencies are inevitable

Polzler and Wright 19[Thomas Pölzler and Jennifer Cole Wright- “Empirical research on folk moral objectivism” <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6686698/> NCBI. Published July 5th 2019] Dulles AS Recut VM

Examining these studies' results more closely, however, makes it less clear whether this interpretation is appropriate (Pölzler, 2018b). Take again Goodwin and Darley's study. In this study, almost 30% of subjects' responses to the disagreement measure and almost 50% of their responses to the truth‐aptness measure fell on the option that the researchers took to be indicative of subjectivism (Goodwin & Darley, 2008, pp. 1347, 1351). Moreover, while some moral statements were dominantly classified as objective (e.g., the above statement about robbery), many others were dominantly classified as nonobjective (e.g., the stem cell research statement). This suggests that subjects in Goodwin and Darley's study may have actually favored what Wright, Grandjean, and McWhite (2013) called “metaethical pluralism,” i.e., they sometimes sided with objectivism and other times with nonobjectivism. More recent studies have by and large confirmed this hypothesis of folk metaethical pluralism. Wright et al. (2013) and Wright, McWhite, and Grandjean (2014), for example, replicated Goodwin and Darley's results, using the exact same measures, but letting subjects classify the presented statements as moral and nonmoral themselves. Objectivity ratings for statements that were dominantly self‐classified as moral varied between as little as 5% and as much as 85%. Research based on different measures yielded high proportions of intrapersonal variation as well (e.g., Beebe, 2014; Beebe, Qiaoan, Wysocki, & Endara, 2015; Beebe & Sackris, 2016; Fisher, Knobe, Strickland, & Keil, 2017; Goodwin & Darley, 2012; Heiphetz & Young, 2017; Wright, 2018; Zijlstra, forthcoming.

#### Ethical claims should be grounded in statistical or empirical proof- it’s the only way to verify the contextual value of any theory and is the basis for corroborating our argumentation.

#### 2. Resolvability- Thousands of years of metaethical debates have concluded in indecisiveness so a 45-minute debate would be unable to correctly resolve nebulous ethical disputes and identify the correct theory. Resolvability outweighs on jurisdiction since it’s a meta-constraint on the judge’s final jurisdiction.

#### 3. Meaning only makes sense within a frame of reference that isolates the practical difference that it makes in action. Pierce 1 [“How to Make Our Ideas Clear” Charles S. Peirce Popular Science Monthly 12 (January 1878), 286-302. Charles Sanders Peirce was an American philosopher, logician, mathematician, and scientist who is sometimes known as "the father of pragmatism” Dulles AS Recut VM]

Let us illustrate this rule by some examples; and, to begin with the simplest one possible, let us ask **what** we mean by calling a thing hard. Evidently thatitwillnotbe scratched by many other substances**.** The whole conceptionofthisquality, as of every other, liesinitsconceivedeffects**.** Thereisabsolutely nodifferencebetween a hard thing and a soft thing solongas they are not brought tothe test. Suppose**, then,** that **a** diamondcouldbecrystallizedin **the midst of a cushion of** softcotton**, and should remain there until it was finally burned up.** Woulditbefalsetosay **that** thatdiamondwassoft? This seems a foolish question, and would be so, in fact, except in the realm of logic. There such questions are often of the greatest utility as serving to bring logical principles into sharper relief than real discussions ever could. In studying logic we must not put them aside with hasty answers, but must consider them with attentive care, in order to make out the principles involved. We may, in the present case, modify our question, and ask what prevents us from saying that all hard bodies remain perfectly soft until they are touched, when their hardness increases with the pressure until they are scratched. Reflection will show that the reply is this: there would be no falsity in such modes of speech. They would involve a modification of our present usage of speech with regard to the words hard and soft, but not of their meanings. For they represent no fact to be different from what it is; only they involve arrangements of facts which would be exceedingly maladroit. This leads us to remark that the question of whatwouldoccurundercircumstanceswhichdo not actually ariseisnot a question offact**,** butonly of the most perspicuous arrangement of them. For example, the question of free-will and fate in its simplest form, stripped of verbiage, is something like this: I have done something of which I am ashamed; could I, by an effort of the will, have resisted the temptation, and done otherwise? The philosophical reply is, that this is not a question of fact, but only of the arrangement of facts. Arranging them so as to exhibit what is particularly pertinent to my question -- namely, that I ought to blame myself for having done wrong -- it is perfectly true to say that, if I had willed to do otherwise than I did, I should have done otherwise. On the other hand, arranging the facts so as to exhibit another important consideration, it is equally true that, when a temptation has once been allowed to work, it will, if it has a certain force, produce its effect, let me struggle how I may. There is no objection to a contradiction in what would result from a false supposition. The reductio ad absurdum consists in showing that contradictory results would follow from a hypothesis which is consequently judged to be false. Many questions are involved in the free-will discussion, and I am far from desiring to say that both sides are equally right. On the contrary, I am of opinion that one side denies important facts, and that the other does not. But what I do say is, that the above single question was the origin of the whole doubt; that, had it not been for this question, the controversy would never have arisen; and that this question is perfectly solved in the manner which I have indicated.

#### 4. This commits us to practical deliberation as the method of moral inquiry Serra 1 [Juan Pablo Serra. What Is and What Should Pragmatic Ethics Be? Some Remarks on Recent Scholarship*.* EUROPEAN JOURNAL OF PRAGMATISM AND AMERICAN PHILOSOPHY. 2009. Francisco de Vitoria College, Humanities Department, Faculty member. Dulles AS Recut VM

This separation of theory and practice runs parallel to another split, namely, that of ethics and morals or, better put, of ethical theory and moral practice. Peirce denies that morality is subject to rationality and thinks that ethics is valuable as a science in a broad sense. But he also regards ethics as a science which bears on human conduct only indirectly, through the examination of past actions and the self-correction of the self in view of future action. In addition, ethics would be a normative knowledge only in so far as it analyzes the adjustment of actions to ends and in so far as it studies the general way in which a good life can be lived. In morals Peirce appeals to instinct and sentiment, and in ethics he recommends the use of logical thinking —just as scientists do. However, even within the framework of his system, it’s not obvious that scientists may so easily set aside their instincts —in fact, instinct (or ‘rational instinct’ as he called it in 1908) plays a significant role in the economy of re- search. Moreover, the statement that in moral issues there may be no possibility of carrying out an inquiry that is truth-oriented is not an uncontroversial one. After all, moral inquiry is performed in a deliberative way, weighing up argumentations, beliefs and principles, and comparing them either with their probable or conceivable consequences or with lived as well as possible experiences that can be forceful or impinge upon the deliberative subject in such a way as to acquire the compulsory resistance due to reality. As Misak puts it succint- ly, “the practice of moral deliberation is responsive to experience, reason, argument, and thought experiments... Suchresponsivenessispartofwhatitistomakea moral decision and part of what it is to try to live a moral life” (2000: 52)3. Likewise, this same deliberativeactivityimpliesanefforttoacquirehabits**,** beliefs and principles thatcontributeto a truly freedeliberation which, in turn, can result in creative conclusions. For Peirce, as you get more habit-governed, you become more creative and free, and your selfhood acquires plas- ticity and receptiveness to experience4. Vincent Colapietro has referred to Peirce’s description of human reason in terms of a deliberative rationality (1999: 24). Also, in another place he has explained that deliberation for Peirce is a process of preparation for future action which has to do with the checking of previous acts, the rehearsal in imagination of different roads to be followed by possible conduct and the nurturing of ideals (Colapietro 1997: 270, 281). It is precisely this experi- ment carried out within imagination that generates habits, because, as Peirce says in “A Survey of Pragmaticism”, “it is not the muscular action but the accompanying inward ef- forts, the acts of imagination, that produce the habit” (CP 5.479, 1907). Habits are regular ways of thinking, perceiving and interpreting that generate actions. As such, habits have a huge influence on human behavior, manifest themselves in the con- crete things we do and, at the same time, are formed within those same activities. Even more, according to Peirce, the activity takes the form of experimentation in the inner world; and the conclusion (if it comes to a definite conclusion), is that under given conditions, the interpreter will have formed the habit of acting in a given way whenever he may desire a given kind of result. The real and living logical conclusion is that habit (CP 5.491, 1907). Much more evidence could be given to support the view that habits are virtually decided (CP 2.435, c.1893) and also that intelligence comprises inward or potential actions that in- fluence the formation of habits (CP 6.286, 1893). Suffice it to say that, according to Peirce, deliberation is a function of the imagination, and that imagination is in itself an experiment which may have unexpected consequences that impose themselves upon the deliberative subject.

#### Thus, the standard is promoting pragmatic deliberation. Prefer-

#### 1. Current philosophical methods fail – we must find a scientific methodology that allows us to arrive at truth

Pierce 1877 - *The Fixation of Belief,* by Charles S. Peirce. (Charles Sanders Peirce was an American philosopher, logician, mathematician, and scientist who is sometimes known as "the father of pragmatism".) Popular Science Monthly 12 (November 1877), 1-15.

This method is far more intellectual and respectable from the point of view of reason than either of the others which we have noticed. But its failure has been the most manifest. It makes of inquiry something similar to the development of taste; but taste, unfortunately, is always more or less a matter of fashion, and accordingly metaphysicians have never come to any fixed agreement, but the pendulum has swung backward and forward between a more material and a more spiritual philosophy, from the earliest times to the latest. And so from this, which has been called the a priori method, we are driven, in Lord Bacon's phrase, to a true induction. We have examined into this a priori method as something which promised to deliver our opinions from their accidental and capricious element. But development, while it is a process which eliminates the effect of some casual circumstances, only magnifies that of others. This method, therefore, does not differ in a very essential way from that of authority. The government may not have lifted its finger to influence my convictions; I may have been left outwardly quite free to choose, we will say, between monogamy and polygamy, and, appealing to my conscience only, I may have concluded that the latter practice is in itself licentious. But when I come to see that the chief obstacle to the spread of Christianity among a people of as high culture as the Hindoos has been a conviction of the immorality of our way of treating women, I cannot help seeing that, though governments do not interfere, sentiments in their development will be very greatly determined by accidental causes. Now, there are some people, among whom I must suppose that my reader is to be found, who, when they see that any belief of theirs is determined by any circumstance extraneous to the facts, will from that moment not merely admit in words that that belief is doubtful, but will experience a real doubt of it, so that it ceases to be a belief.

To satisfy our doubts, therefore, it is necessary that a method should be found by which our beliefs may be determined by nothing human, but by some external permanency -- by something upon which our thinking has no effect. Some mystics imagine that they have such a method in a private inspiration from on high. But that is only a form of the method of tenacity, in which the conception of truth as something public is not yet developed. Our external permanency would not be external, in our sense, if it was restricted in its influence to one individual. It must be something which affects, or might affect, every man. And, though these affections are necessarily as various as are individual conditions, yet the method must be such that the ultimate conclusion of every man [one] shall be the same. Such is the method of science. Its fundamental hypothesis, restated in more familiar language, is this: There are Real things, whose characters are entirely independent of our opinions about them; those Reals affect our senses according to regular laws, and, though our sensations are as different as are our relations to the objects, yet, by taking advantage of the laws of perception, we can ascertain by reasoning how things really and truly are; and any man, if he have sufficient experience and he reason enough about it, will be led to the one True conclusion. The new conception here involved is that of Reality. It may be asked how I know that there are any Reals. If this hypothesis is the sole support of my method of inquiry, my method of inquiry must not be used to support my hypothesis. The reply is this: 1. If investigation cannot be regarded as proving that there are Real things, it at least does not lead to a contrary conclusion; but the method and the conception on which it is based remain ever in harmony. No doubts of the method, therefore, necessarily arise from its practice, as is the case with all the others. 2. The feeling which gives rise to any method of fixing belief is a dissatisfaction at two repugnant propositions. But here already is a vague concession that there is some one thing which a proposition should represent. Nobody, therefore, can really doubt that there are Reals, for, if he did, doubt would not be a source of dissatisfaction. The hypothesis, therefore, is one which every mind admits. So that the social impulse does not cause men to doubt it. 3. Everybody uses the scientific method about a great many things, and only ceases to use it when he does not know how to apply it. 4. Experience of the method has not led us to doubt it, but, on the contrary, scientific investigation has had the most wonderful triumphs in the way of settling opinion. These afford the explanation of my not doubting the method or the hypothesis which it supposes; and not having any doubt, nor believing that anybody else whom I could influence has, it would be the merest babble for me to say more about it. If there be anybody with a living doubt upon the subject, let him consider it.

#### 2. Performativity- Responding to our framework concedes the validity of agonism since that in and of itself is a process of contestation that agonism would say is valuable and necessary for spaces like debate to function.

#### 3. TJFS- Frameworks should be fair/educational like any other argument. A] Inclusion – Deliberation definitionally is a procedural for allowing almost any argumentation in the debate space which controls the internal link to inclusion which is an impact multiplier B] Resource Disparities- Discursive frameworks ensure big squads don’t have a comparative advantage since debates become about quality of arguments rather than quantity and require a higher level of analytic thinking that small schools have.

#### 4. Deliberation is procedural not substantive, which means that we are first concerned with the decision-making procedure of deliberation and then evaluation of what impacts matter most. To clarify, consequences are a sequencing question. Serra 2 [Juan Pablo Serra. What Is and What Should Pragmatic Ethics Be? Some Remarks on Recent Scholarship*.* EUROPEAN JOURNAL OF PRAGMATISM AND AMERICAN PHILOSOPHY. 2009. Francisco de Vitoria College, Humanities Department, Faculty member. Dulles AS Recut VM

BY WAY OF CONCLUSION: As LaFollette presents it, the key to understanding pragmatist ethics is that it is not an ethical theory per se, but rather it is an anthropology, a way of understanding the human being and his moral action. Therefore, pragmatist ethics in reality does not propose a new ethical theory, but rather “reconstructs” through a new prism the basic intuitions of the best ethical theories. The fundamental element on which the attention of pragmatist ethics centers is deliberation. Deliberation is not directly responsible for directing action, but only does so indirectly, by means of a critique of past actions, the effort to correct or reinforce certain habits and mental experiments that each actor performs in order to determine his own future conduct, and even to determine in a general manner the way in which one wishes to live one’s life (or, what amounts to the same thing, the type of person one wishes to be). The task of a pragmatist ethics, therefore, is not to provide final solutions, but rather to indicate that it is only via the testing and communication of experiences that the superiority of one moral idea over another can be demonstrated. In this sense, one of the principal missions of any given version of pragmatist ethics is to indicate some general manner in which habits can be acquired which, later, will facilitate personal deliberation – both internal and external – in the broad variety of circumstances which make up the moral life.

#### 5. Pragmatic theory provides a procedure that accounts for plurality within society and enables resolution of conflicts despite conflicting values– this avoids appealing to hegemonic and authoritarian value systems

Ralston 11 - Shane J. In Defense of Democracy as a Way of Life: A Reply to Talisse’s Pluralist Objection. sites.psu.edu/wp-content/uploads/sites/9354/2011/09/InDefenseDemocracyWayLife-SRalston.pdf.

In this penultimate section, I present Dewey’s pluralist procedure and offer an illustration of democracy-as-a-way-of-life-in-action: the ‘reasonable accommodation’ debate in Québec, Canada. The reason for examining this case study is not only to illustrate how procedures central to Deweyan democracy operate in practical politics, but also to challenge an implicit assumption of Talisse’s objection, namely, that a single reasonable objection to a democratic theory is sufficient to disqualify it.89 What is **Dewey’s pragmatic standard of inclusion**? It **is a highly**, though by no means exclusively**, proceduralist standard** that asks and answers two questions. The first question pertains to the plurality of interests held in common by different groups—even those espousing divergent beliefs and conflicting worldviews. Specifically, it queries those affected groups, “How numerous and varied are the interests which are commonly shared?”90The second question concerns whether these groups are open to readjusting the ways in which they associate. It asks, “How full and free is the interplay [of conventional forms of association] with other forms of association?”91 Thus, **Dewey’s procedure for addressing the fact of pluralism might be called the ‘mutual interest and associative flexibility’ standard of inclusion**. According to this two-step procedure, **members of different groups**, first**, identify their shared interests and,** second, **propose novel and flexible ways for associating in order to address their shared problems. No part of this** procedure is coercive or “oppressive” as measured against Rawls’s standard of reasonable pluralism. Moreover, no part **requires that groups subordinate their separate worldviews to** what Talisse terms **“a substantive conception of democracy.”** Furthermore, no part coerces citizens **to conform their values and ways of life to a governmentally endorsed regime of value commitments**, or an official conception of the good life. According to Larry Hickman, “Pragmatism holds that cultural difference per se is not an occasion that calls for inquiry, but only cultural difference that leads to a situation in which there are mutually exclusive claims about what is to be done.”92 Therefore, **democracy as a way of life represents a method, not a state-sponsored worldview**—a procedure **for negotiating**, though not permanently resolving, the **deeply divisive and sometimes intractable difference**s between groups beholden to competing forms of life. In this way, **Dewey’s democratic theory resembles**, as William Caspary suggests**, a framework for understanding democracy as a method for mediating conflicts**.93 To demonstrate how Dewey’s pluralist procedure functions in a practical political setting, I would like to examine a recent public policy debate in Canada. When a law or norm is contrary to the Canadian Charter of Human Rights and Freedoms, the government has a legal obligation to modify the law or norm accordingly—to, in effect, accommodate reasonable differences between individuals and groups within a liberal regime of procedures and rules. For instance, despite the legal requirement that all voters show their face when casting a ballot, Elections Canada has permitted an exemption for Muslim women wearing the niqab (veil) or burka.94 Though these exemptions are well-intentioned, heated dispute has arisen at the margins. Those groups whose members have been granted exemptions face rival groups claiming that the exemptions violate norms of fair and equal treatment. In the province of Québec, the public debate has oscillated between civil confrontation and xenophobic denunciations. The question at issue is, under what circumstances does accommodation become unreasonable?95 To address the escalating tensions between these groups and their competing ways of life, the provincial government has established a commission composed of two renowned Canadian public intellectuals.96 The Reasonable Accommodation Commission consults with academics, policy leaders and members of the rival groups. Though the results have been mixed, **an institutional form** (viz. the Commission) has **been established as an initial step towards progressively arbitrating**, though not permanently settling, the contested nature of what constitutes reasonable (versus unreasonable) accommodation.97 To appreciate the significance of the ‘reasonable accommodation’ debate for my overall argument, it helps to consider the rationale for examining this and other case studies. One reason is to show that in the context of practical politics it would be unreasonable to accept Talisse’s low threshold for invalidating a democratic theory, viz., a single reasonable objection. Instead, **if Dewey’s democratic theory is to be criticized internally**—or to borrow Talisse’s phrase**, “on its own pragmatic grounds”—the theory must be evaluated with respect to its practical consequences for actual public policies**. Does the Canadian policy respect the ethnic, cultural, religious and philosophical differences among citizens? Does it enhance political legitimacy and regime stability? Does it tend to bring about fair and just outcomes? Answering these kinds of questions does not fall solely within the preserve of philosophers or democratic theorists. In the real world of democratic politics, policy questions such as these are rarely sequestered to faculty seminars for philosophers and democratic theorists to settle.98 Instead, questions of this type are matters of public policy, addressing problems that are better left to ordinary citizens and their representatives to deliberate about, negotiate over and decide on appropriate policy solutions to. If political philosophers and democratic theorists have any role to play in the policy process, it is that of public intellectuals attempting to persuade their fellow citizens to see the value in sharing their views—a role to which Dewey was no stranger.99 **In the world of rough-and tumble politics**, unlike the faculty seminar room, **a** **single objection, even if reasonable, is rarely enough to disqualify a candidate theory that would, by its adoption, likely improve our political practices, or the methods by which we solve our common problems**. So, Talisse has more work to do if he hopes to successfully convince a critical mass of citizens and policy-makers—let alone pragmatists and Deweyans—to say “farewell to Deweyan democracy.”100 Conclusion Both formulations of Talisse’s pluralist objection fail to convince Deweyans to drop the language of pluralism because democracy as a way of life cannot be construed as an endorsement for a state-sponsored comprehensive worldview or a thoroughly substantive conception of democracy. Instead, **Dewey offers a two-step procedure for negotiating** TRANSACTIONS Volume 44 Number 4 646 **the inescapable fact of pluralism**. Similar to this procedure, the approach taken by the Canadian Reasonable Accommodation Commission highlights the affected parties’ mutual interests and suggests flexible new ways for them to associate. However, one might object that this illustration poses the risk of resorting to the same filtering strategy I have identified in Talisse’s work, that is, reading Dewey’s ideas through contemporary theoretical frameworks. Appeals to recent political events typically invoke theories, approaches and views that were alien to Dewey’s times and thought, and in ways strikingly similar to Talisse’s Berlinian, Rawlsian and Sandelian filters. While the risk of filtering is undeniable, I believe that the pragmatic value of appealing to these recent events justifies that risk. Not only does the practice help us to see the contemporary relevance of Dewey’s ideas, it also assists Dewey scholars to rebut objections similar to Talisse’s, and to decline like-minded invitations to give up the language of contemporary political theory. 101

### 1AC – Offense

#### 1. Destroying the right to strike takes away workers’ basic right to argumentation – the right to strike preserves contestability.

**Lindblom**, Lars. "Consent, contestability, and unions." *Business ethics quarterly* 29.2 (2019): 189-211.

To provide a justification of unions is to give justificatory reasons for the rights to form unions and non-discrimination of union members and the duty of good faith bargaining. Moreover, the theory we are looking for must be able to handle the problem concerning acts of employer authority that created difficulties for the consent-based theories, such as libertarianism. Let us, then, turn to how unions can implement contestability and thereby solve the problem of consent. Starting with the basis of contestation, the demand for transparency solves, as was noted above, the problem of information. With transparency in place, employees will be informed about the policies and decisions that affect them. This aspect of contestability demands that parties make clear the reasons that are moving them when making decisions. This, in turn, underwrites some preconditions for good faith bargaining and provides a link between contestability and unions. Now, it is quite obvious that there is a connection between unions and voice. Part of the purpose of a union is to enable its members to express their views or demands and to make their voices heard. The fact that a group of people, rather than an individual, expresses itself when a union speaks out makes it more probable that what is being expressed is also heard. If we want to get serious about voice, we should have mechanisms that implement it efficiently. Therefore, a right to form unions would seem to follow from the implementation of contestability. This indicates, furthermore, that the right to strike should be protected as a part of the implementation of the mechanism of contestability, since such a right safeguards the possibility to make one’s voice heard.12 Moreover, discrimination of union members would undermine this mechanism for voice. If employees fear that they will be retaliated against if they speak out, they will clearly be hesitant to voice their concerns. Nondiscrimination of union members is, therefore, a demand of the ideal of contestation. These two points imply that the standard of cooperation should include a norm against the discrimination union members and respect for the right to form unions

.

#### 2. Strikes are intrinsically tied to public forums that provide opportunities for deliberation.

**Simm 18** Melanie Simms, 3-23-2018, "Why workers go on strike," Conversation, https://theconversation.com/why-workers-go-on-strike-93815

Both of these demonstrate how a strike around a fairly technical employment issue can develop a momentum of its own and become a catalyst for a much wider expression of dissatisfaction about the changing bargains being made. As with the concerns raised by junior doctors about [the management of the NHS](https://www.theguardian.com/society/2016/sep/01/what-you-need-to-know-about-the-junior-doctors-strike), the higher education pension dispute has rapidly become a space in which to question the [broader direction of the sector](https://theconversation.com/university-lecturer-explains-why-academics-are-striking-over-pension-cuts-93039). In this context, emotions can run high. Many relationships are strengthened, but some inevitably become strained. By definition, strikes are not business as usual. What then becomes important, is how the parties can explicitly negotiate compromises that smooth the way back to work – even if that means negotiating a new normal.

### 1AC - Plan

#### Plan text: The United States ought to recognize an unconditional right to strike for agricultural laborers by amending the National Labor Relations Act to extend the definition of ‘employee’ to include agricultural laborers.

#### Squo NLRA fails to protect farmer’s rights to strike – plan amends the NLRA to collectively bargain

Reilly, 11, Penn State Law, “Agricultural Laborers: Their Inability to Unionize Under the National Labor Relations Act”, Penn State: Masters of Science, JD Law, URL: <https://pennstatelaw.psu.edu/_file/aglaw/Publications_Library/Agricultural_Laborers.pdf>, 2011 + since most recent citation is from then, KR

The NLRA gives workers “freedom of association, self-organization, and designation of representatives of their own choosing” in order to equalize the bargaining power between employers and employees in the hopes of limiting the interruptions to the free flow of commerce.10 The statute covers a large number of workers based on the broad definition of “employee,”11 but excludes from coverage all agricultural laborers.12 The NLRA does not define who these agricultural laborers are that are excluded from the right to organize, but rather Congress has instructed the National Labor Relations Boards (NLRB)13 in the annual Appropriations Act that in determining who is an agricultural laborer excluded from the NLRA, to rely on the definition of “agriculture” found in the Fair Labor Standards Act (FLSA).14 Agriculture in the FLSA is defined as “farming in all its branches ... and any practices ... performed by a farmer or on a farm as an incident to or in conjunction with such farming operations...”15 The definition also lists specific activities to further define what would specifically be considered agricultural work.16 Therefore, workers whose responsibilities are contained in the FLSA’s definition of “agriculture” are excluded from the right to organize and form unions under the NLRA.

The reasoning behind this exclusion is somewhat vague, especially considering that the bill originally proposed in the Senate did not exclude agricultural laborers from the definition of “employee.”17 There is not much mentioned about the agricultural exclusion because of the statute’s primary focus on addressing problems in the industrial sector. There is, however, a debate from in the House addressing the agricultural laborer exemption,18 where an argument was made that agricultural laborers should be included because they needed the same protections as industrial workers. Agricultural labor issues were brought to light in 1935 after governmental investigations into child labor issues and the lack of clean water provided for such workers.19

In response, two possible reasons were briefly mentioned that may explain why agricultural laborers were excluded: first, in regions like the Midwest, farms are mostly family farms and should not be within the scope of the NLRA, and second there was a concern that Congress did not have jurisdiction over agricultural workers because it was questionable whether such workers were engaged in interstate commerce.20 Many commentators believe that it was the former argument that led to the exclusion of agricultural workers from protection under the NLRA. Another possible reason for this exclusion as presented by some commentators is that the larger farms lobbied to have their workers excluded from the NLRA.21 While not expressly stated, the most likely explanation is that Congress wanted to protect the family farmer from having to pay higher wages that unions would inevitably demand of the employers.22 Realizing that agriculture was important to the entire nation, Congress wanted to shield this industry from unionization, and wanted to protect the family farmer from having to pay what they could not afford. Congress did not think it necessary to equate the family farmer with big business.

The broad definition of “agriculture” under the FLSA would seem to exclude from the NLRA any worker who is employed by any agricultural entity. This is not the case, however, because the Supreme Court has adopted a two-part test to determine if an employee is in fact an agricultural laborer excluded from the NLRA.23 An agricultural employee will be excluded from the right to organize if he or she is engaged in either primary or secondary farming. The Supreme Court has taken the FLSA definition of agriculture and essentially limited its application based on a strict application of the statutory language. Primary farming are those tasks specifically referred to in the statutory definition of “agriculture” such as “cultivation and tillage of the soil [and] dairying.”24 The rest of the definition is considered secondary farming, and therefore a worker is an agricultural laborer if the work performed is of the type that would be performed “by a farmer or on a farm as an incident to or in conjunction with such farming operations.”25

In one of the more recent cases to address the question of who is considered an agricultural employee, the Supreme Court in Holly Farms Corp. v. N.L.R.B. upheld the determination made by the NLRB that workers on live-haul chicken crews do not engage in agricultural labor and therefore are not subject to the agricultural exception from the NLRA.26 The responsibility of the live-haul crew is to enter the farms of independent contractors who raise chickens supplied by Holly Farms; the chickens are then caught and caged by nine chicken catchers, moved by a forklift operator onto a truck to be transported by a truck driver to the processing plant.27 These live-haul crews were not engaged in primary farming because primary farming would have been the actual raising of the poultry, which was the responsibility of the independent contractors, not the live- haul crews.28

The court then focused on whether these live-haul crews were engaged in secondary farming. In doing so, the court immediately found that that the work performed by the live-haul crews were not of the kind “performed by a farmer” because Holly Farms gave up its farmer status as soon as the chicks were delivered to independent contractors for raising.29 As a result of this determination, the truck drivers were not considered agricultural laborers and were therefore not part of the agricultural exception to the NLRA and were able to unionize.30

The court then looked to whether the chicken catchers and forklift operators were engaged in work “on a farm as an incident to or in conjunction with” raising poultry.31 The Supreme Court found that neither the chicken catchers nor the forklift operators “worked on a farm” because the work these employees performed were part of Holly Farms’ poultry processing operations and was not of the type of work contemplated to be included in the statutory definition of “farming.”32 The Supreme Court adopted the reasoning of the NLRB in deciding that the catchers and forklift operators were not performing work “incident to or in conjunction with” the farming operations of the independent contractors.33 In doing so, the Supreme Court decided that it was more important to look at the status of the employer as a farmer rather than where the laborer carried out the responsibilities of the job he or she was hired to perform. Because, as previously determined, Holly Farms was not considered a farmer by the time the live- haul crews went in to catch the chickens, the catchers and the forklift operators were not engaged in secondary farming as defined in the FLSA.34 This meant that all the members of the live-haul crews were not agricultural laborers and therefore all had the right to organize under the NLRA.

The Supreme Court limited the applicability of the definition of “agriculture” in Holly Farms and in doing so opened up the possibility that more workers employed by large, vertically integrated employers would be able to organize.35 By taking the approach to look at the status of the employer rather than where the work is performed, the Supreme Court broadened the already broad definition of “employee” under the NLRA. More employees working for these vertically integrated employers will be able to experience the protection of the NLRA that has been open to industrial workers since the act was first passed in 1935. The impact of the Holly Farms decision is for courts to engage in an in depth analysis before deciding whether a worker is an agricultural laborer not protected by the NLRA. Switching the focus to the status of the employer rather than where the employees are performing their responsibilities will ensure greater protection for workers and a broader reach of the NLRA.

While the definition of “employee” has expanded to include some employees who are employed by agricultural employers, there is still the exception for agricultural laborers included in the statute and therefore there are still many workers who are unable to form unions. These may be the workers that need the most protection because they are the field workers who are subjected to abuse, poverty and hazardous working conditions.36 Many commentators would like to see the NLRA extended to include agricultural laborers. The main advantage to extending the definition of “employee” to include agricultural laborers under the NLRA is that the statute has been in existence for many years, and most of the challenges that would be brought up with respect to agricultural laborers attempting to unionize have most likely already been resolved in other employment sectors allowing the NLRB and courts to rely on precedent. This will make application of the statue to the agricultural laborers consistent with other employment sectors. Reliance on precedent would lead to predictable outcomes when labor disputes arise. Agricultural laborers still have a ways to go before they will be able to reap the benefits of the NLRA; but, if this were to happen, agricultural laborers would be able not only to unionize and have their association protected, but also would have the advantage of being able to rely on others with experience and knowledge of the NLRA and its intricacies.

#### The aff is key to increase incentives to farm: it increases wages, sets safe living conditions, AND helps farmers expand products

Reilly, 11, Penn State Law, “Agricultural Laborers: Their Inability to Unionize Under the National Labor Relations Act”, Penn State: Masters of Science, JD Law, URL: <https://pennstatelaw.psu.edu/_file/aglaw/Publications_Library/Agricultural_Laborers.pdf>, 2011 + since most recent citation is from then, KR

The rate of pay agricultural laborers earn in return for their work would increase if these workers were able to organize and engage in collective bargaining with their employers. Agricultural workers in 2008 made between $8.64 per hour and $13.02 per hour.50 The hourly wage is relatively low, especially when compared to other occupations with the ability to unionize that require similar training and working conditions. For example, construction laborers in 2008 earned between $10.80 and $14.95 per hour51 and textile, apparel and furnishing workers earned between $9.14 and $18.15 per hour.52 While there is a wide range of earnings for anyone entering these three professions, the two professions that are able to unionize earn more per hour on a national level than the agricultural workers who are exempted form organizing under the NLRA. The low earnings of agricultural laborers as compared to other laborers supports a finding that the NLRA would benefit agricultural laborers and are the type of workers that were meant to be extended the right to organize. If agricultural laborers were afforded protection under the NLRA to engage in collective bargaining, the likely result would be that bargaining representatives would be able to negotiate with agricultural employers for higher wages that would lead to less of an earnings gap between agricultural laborers and laborers in other industries.

There is one major similarity between the construction industry and the agriculture industry that would seem to tip the scales in favor of affording agricultural laborers the right to unionize under the NLRA. That is that both industries hire seasonally.53 The seasonal nature of agricultural work is often cited as a reason against unionization, but with the similarity in the construction industry and the ability of those workers to unionize, the seasonal nature of agricultural work should be a factor in considering whether or not to include these workers under the NLRA, but is not itself conclusive. If seasonal workers in other industries are able to unionize, the seasonal nature of agricultural work should not be a major point of opposition to allowing agricultural laborers the right to collectively bargain.

Agricultural laborers are also subject to harsh conditions because of the work that they perform and should be able to organize under the NLRA in order to bargain with their employers for better working conditions. Agricultural laborers are not always provided with access to clean drinking water nor are there typically adequate restroom facilities for these workers to use.55 Unions can help workers to gain access to sanitary facilities and clean drinking water by bargaining for these necessities with the employers.56 By making these issues part of a collective bargaining agreement, unions will be able to hold employers contractually liable to follow such conditions and will thereby improve the conditions of employment for agricultural laborers who would otherwise be subject to sub-standard facilities.

Another hazardous working condition that arises for agricultural laborers is the exposure to pesticides. Agricultural laborers may be exposed to pesticides that are carcinogens or other pesticides that affect the endocrine and/or hormone systems.57 Agricultural laborers, especially those who apply pesticides, are at a greater risk of acute pesticide poisoning which many times is more prevalent than it needs to be because agricultural employers do not take the kinds of precautions necessary to prevent pesticide poisoning.58 Unions again can aid agricultural laborers by limiting such exposure through a collective bargaining agreement because unions would be able to bargain for certain safety precautions to be taken before workers are able to spray pesticides and can also ensure that safety gear is provided before spraying commences. Inadequate facilities and pesticides are two examples of the hazardous conditions that agricultural laborers are exposed to that could be cured through the right to unionize and collectively bargain with employers. Unions would be able to protect workers from such sub-standard conditions which in turn would lead to less illness and disease that agricultural laborers would be subjected to and would increase productivity on farms because field workers will not be slowed by sickness and would be able to work more as a result.

Further, “farmers, planters, ranchmen, dairymen, nut or fruit growers” are able to form associations for the mutual benefit of all members.59 These associations allow their members to work collectively in preparing their products for market.60 These producers are also able to form cooperatives to market their products and maintain the “bargaining position of individual farmers” in order to prevent adverse consequences of overcrowding the market.61 These agricultural producers are free to engage in concerted activity for the mutual protection of the association’s members, but agricultural laborers are exempt from asserting these same rights.62 Agricultural producers are therefore able to become even stronger entities, further widening the differences in the bargaining positions between producers and agricultural laborers. The unionization of agricultural laborers would better equalize the bargaining position on each side affording laborers the protections they need against agricultural employers as they become more powerful through associations.

### Advantage – Wages

#### Multiple studies prove that farmer’s investments are based on their economic confidence which ONLY the plan boosts

Wang et. al, 19, “How Farmers Make Investment Decisions: Evidence from a Farmer Survey in China”, Sustainability, Shuangjin Wang 1, Yuan Tian 2,\*ORCID, Xiaowei Liu 3 and Maggie Foley 4, 1: School of Management, Tianjin University of Commerce, Tianjin 300134, China, 2: School of Economics and Management, Beijing Jiaotong University, Beijing 100044, China, 3: College of Business, St. Ambrose University, Davenport, IA 52803, USA, 4: Davis Business School, Jacksonville University, Jacksonville, FL 32211, USA, URL: <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwii17vKue7zAhVdJjQIHUr3D7YQFnoECAUQAQ&url=https%3A%2F%2Fwww.mdpi.com%2F2071-1050%2F12%2F1%2F247%2Fpdf&usg=AOvVaw1RMvM-hGadn_uoetBxebDi>, KR

A variety of research methods were used in previous research to study farmers’ investment adjustment behavior from different perspectives. For example, Factor Analysis [3,7], Multinomial Logit Model [8,10,11], Deterministic Discrete Event Model [9], Mixed Logit Model with Flexible Mixing Distribution [12], Tobit Model [13,14], Probit Model [15–17], and Structural Equation Modeling [18,19].

It is widely accepted that farmers’ investment adjustment behavior is affected by many factors, but different literature has different opinions on key influencing factors that affect farmers’ investment behavior. Adimassu et al. [20] have found that farmers’ investments are limited by their capabilities. Okello et al. [21] have revealed that economic benefits, such as higher yields and income, can affect farmers’ investment in seed selection. Also, the cropped area, scale of the farmland, and agricultural income significantly influence farmers’ willingness to invest [10]. The government’s support and favorable policies can positively promote the agriculture investment of farmers [22,23]. Adimassu et al. [2] finds that farmers’ investment behavior is affected by five major factors: households’ resource endowments, knowledge, and experience of farming, access to information, social capital, and availability of family labor.

Moreover, some economic studies focus on specific factors that affect investment choice, such as state subsidies [24], the impact of agricultural cooperatives [25], risk preferences [26,27], the mode of communal land acquisition [28], government policies [29], and the presence of a price floor [13]. Besides, Ullah and Anad [30] examine the factors that influence the level of agricultural mechanization: economic condition of farmers, the land tenure system, scale of farmland, cost of fuel, and the cost of renting agricultural machinery. Konrad et al. [15] have found that the scale of farm operations, environmental concerns, and innovation readiness are important for farmers’ technology investments.

Factors such as the effect of planting structure adjustment and the output elasticity of capital can affect the investment adjustment behavior of farmers, and have been investigated by some studies. Ji et al. [31] have found that the shortage of a labor force can be supplemented by increasing capital input. In addition, other reasons may also lead to investment adjustment behavior such as attitudes toward capital input [4], the amount of agricultural income [32], expected financial benefits from capital input [33], and differences in adjustment capabilities [34].

#### Crop yield key for meeting food criteria in upcoming generations

Tian et al 21-- Tian, Zhixi [principal investigator, Institute of Genetics and Developmental Biology and former research geneticist at Purdue], et al. "Designing future crops: challenges and strategies for sustainable agriculture." The Plant Journal 105.5 (2021): 1165-1178. (AG DebateDrills)

The first straightforward strategy for designing future crops that meet sustainable agriculture requirements is to improve the following aspects of current well-cultivated crops. Increasing yield. It is estimated that the yields of major crops need to increase at a rate of 2.4% per year to meet the food supply demand by 2050. However, the current growth rates of the four major crops, maize (Zea mays), rice (Oryza sativa), wheat (Triticum aestivum), and soybeans (Glycine max), are only approximately half of this anticipated rate (Ray et al., 2013). The development of new varieties with high yield potential that can fill this gap is the foremost mission of the Future Crops Design project. In fact, in a trial, it was reported that a super-high-yield rice variety could produce one- to threefold more grains under optimal conditions than in normal paddy fields (Liu et al., 2020a). Improving nutritional quality. Although the amount of food supply has been significantly improved in the last half-century, changes in human lifestyle and food consumption have resulted in a phenomenon called hidden hunger (Nair et al., 2016). For instance, in sub-Saharan Africa and America, about 17–30% of children under the age of 5 years have an inadequate daily intake of Vitamin A (Harjes et al., 2008; Haskell, 2012). It has been reported that about two billion people are suffering from a chronic deficiency of micronutrients (WHO, 2008), a new threat to human health. Moreover, the incidence of type-2 diabetes, obesity and colon disease has markedly increased in the past decade (Zhou et al., 2016). Hence, the second mission of the Future Crops Design project is to generate crops with higher/balanced nutritional quality or specialized metabolites using metabolic engineering and synthetic biology approaches (Francis et al., 2017; Martin and Li, 2017; Sweetlove et al., 2017; Vasconcelos et al., 2017). Increasing agricultural resource use efficiency. It was reported that ~17% of arable land has lost productivity since 1945 due to inappropriate agriculture management (Oldeman, 1994). In fact, nutrient-use efficiencies of today’s crops only reach 30–50% for nitrogen fertilizer (Cassman et al., 2002) and ~45% for phosphorus fertilizer (Smil, 2000). Moreover, fresh water has become a limiting factor for agriculture in many areas in the world. It is estimated that about 2800 km3 of fresh water per year is used for agricultural irrigation, and that crop production decreases by ~20% without irrigation (Siebert and Doll, 2010). Therefore, to reduce agricultural inputs and environmental burdens, we should aim to develop high nutrient and water-use efficiency crops without yield penalty.

#### Resorting to farmland expansion to meet food demand is not sustainable —we are on the brink of prohibitive ecological costs from deforestation

Tian et al 21-- Tian, Zhixi [principal investigator, Institute of Genetics and Developmental Biology and former research geneticist at Purdue], et al. "Designing future crops: challenges and strategies for sustainable agriculture." The Plant Journal 105.5 (2021): 1165-1178. (AG DebateDrills)

From the perspective of human evolution, each period of rapid population growth, such as during the Neolithic agricultural revolution, which began at about 8000 BC, the hydro agricultural or irrigation revolutions in the Near East, which began about 3000 BC, and the medieval and modern agricultural periods, which began about 1000 AD, benefited from an advance in agriculture (Taiz, 2013; Wallace et al., 2018). The recent rapid population growth during the past 300 years, in contrast, mainly resulted from the Industrial Revolution, which began in Britain about 1760. The Industrial Revolution greatly increased the range of human activities and accelerated farmland expansion. In 1700, it was reported that nearly 95% of Earth’s ice-free land consisted of wildlands and semi-natural anthromes; however, by 2000, ~55% of these regions were used as arable land (Figure 1a, data from https://ourworldindata.org/). The Industrial Revolution also gave birth to new technologies and production systems in agriculture, such as the application of larger irrigation systems, and more fertilizers and pesticides. In the 1960s, semi-dwarf wheat and rice varieties were introduced. These semi-dwarf crops exhibit beneficial characteristics, such as improved response to fertilizer input, lodging resistance and enhanced light utilization (Hedden, 2003; Wallace et al., 2018). Along with the fertilizers, pesticides and irrigation systems made possible by the Industrial Revolution, semi-dwarf crops were quickly adopted and resulted in a significant increase in total grain production globally. This big leap in agriculture was known as the ‘Green Revolution’ (Khush, 2001). Indeed, statistical data have revealed that the average daily food supply per person (in terms of calories) has doubled since the middle of the 19th century (Figure 1b, data from https://ourworld indata.org/). It is estimated that the world population will rise to more than 9 billion by 2050 (Alexandratos, 1999; Cassman, 1999), and at that time we will need at least 60% more food than is consumed by humans today. Moreover, our population will continuously increase, reaching over 11 billion by 2100 (Figure 1a, data from https://ourworldindata.org/). How to feed the increasing population is a challenge facing the whole world (Tilman et al., 2001; Godfray et al., 2010; Foley et al., 2011; Wallace et al., 2018). A simple solution to feed a population of 9 billion is to constantly turn wild habitats into farmland. However, this type of expansion is unrealistic as most of the world’s icefree and non-barren land area has been exhausted, and much of the rest is unlikely to sustain high yields (Cassman, 1999). More importantly, intact forests have been known to play essential roles in protecting the environment, such as storing fresh water, decreasing flooding and regenerating fertile soils. Clearing of forests will result in prohibitive ecological costs, such as loss of biodiversity and greenhouse gas emissions. It was reported that, due to agriculture expansion, ~30% of all plant species will become extinct (Taiz, 2013). The destruction of tropical forests releases about 1.1 9 1012 tons of carbon per year, which accounts for 12% of total anthropogenic CO2 emissions (Friedlingstein et al., 2010).

#### Increased yield prevents devastating environmental destruction which causes major bio-diversity loss that leads to extinction.

**Torres 16** [Phil Biologist, conservationist, science advocate & educator. 2 years based in Amazon rainforest, now exploring science around the world. “[Biodiversity Loss: An Existential Risk Comparable to Climate Change](http://futureoflife.org/2016/05/20/biodiversity-loss/)” <http://futureoflife.org/2016/05/20/biodiversity-loss/>.]

According to the Bulletin of Atomic Scientists, the two greatest existential threats to human civilization stem from climate change and nuclear weapons. Both pose clear and present dangers to the perpetuation of our species, and the increasingly dire climate situation and nuclear arsenal modernizations in the United States and Russia were the most significant reasons why the Bulletin [decided](http://thebulletin.org/press-release/doomsday-clock-hands-remain-unchanged-despite-iran-deal-and-paris-talks9122) to keep the Doomsday Clock set at three minutes before midnight earlier this year.

But there is another existential threat that the Bulletin overlooked in its Doomsday Clock announcement: biodiversity loss. This phenomenon is often identified as one of the many consequences of climate change, and this is of course correct. But biodiversity loss is also a contributing factor behind climate change. For example, deforestation in the Amazon rainforest and elsewhere reduces the amount of carbon dioxide removed from the atmosphere by plants, a natural process that mitigates the effects of climate change. So the causal relation between climate change and biodiversity loss is bidirectional.

Furthermore, there are myriad phenomena that are driving biodiversity loss in addition to climate change. Other causes include ecosystem fragmentation, invasive species, pollution, oxygen depletion caused by fertilizers running off into ponds and streams, overfishing, human overpopulation, and overconsumption. All of these phenomena have a direct impact on the health of the biosphere, and all would conceivably persist even if the problem of climate change were somehow immediately solved.

Such considerations warrant decoupling biodiversity loss from climate change, because the former has been consistently subsumed by the latter as a mere effect. Biodiversity loss is a distinct environmental crisis with its own unique syndrome of causes, consequences, and solutions—such as restoring habitats, creating protected areas (“biodiversity parks”), and practicing sustainable agriculture.

Deforestation of the Amazon rainforest decreases natural mitigation of CO2 and destroys the habitats of many endangered species.

The sixth extinction.

The repercussions of biodiversity loss are potentially as severe as those anticipated from climate change, or even a nuclear conflict. For example, according to a 2015 [study](http://www.ncbi.nlm.nih.gov/pubmed/26601195) published in Science Advances, the best available evidence reveals “an exceptionally rapid loss of biodiversity over the last few centuries, indicating that a sixth mass extinction is already under way.” This conclusion holds, even on the most optimistic assumptions about the background rate of species losses and the current rate of vertebrate extinctions. The group classified as “vertebrates” includes mammals, birds, reptiles, fish, and all other creatures with a backbone.

The article argues that, using its conservative figures, the average loss of vertebrate species was 100 times higher in the past century relative to the background rate of extinction. (Other scientists have suggested that the current extinction rate could be as much as 10,000 times higher than normal.) As the authors write, “The evidence is incontrovertible that recent extinction rates are unprecedented in human history and highly unusual in Earth’s history.” Perhaps the term “Big Six” should enter the popular lexicon—to add the current extinction to the previous “Big Five,” the last of which wiped out the dinosaurs 66 million years ago.

But the concept of biodiversity encompasses more than just the total number of species on the planet. It also refers to the size of different populations of species. With respect to this phenomenon, multiple studies have confirmed that wild populations around the world are dwindling and disappearing at an alarming rate. For example, the 2010 [Global Biodiversity Outlook](https://www.cbd.int/gbo3) report found that the population of wild vertebrates living in the tropics dropped by 59 percent between 1970 and 2006.

The report also found that the population of farmland birds in Europe has dropped by 50 percent since 1980; bird populations in the grasslands of North America declined by almost 40 percent between 1968 and 2003; and the population of birds in North American arid lands has fallen by almost 30 percent since the 1960s. Similarly, 42 percent of all amphibian species (a type of vertebrate that is sometimes called an “ecological indicator”) are undergoing population declines, and 23 percent of all plant species “are estimated to be threatened with extinction.” [Other studies](http://commondreams.org/views/2016/02/10/biodiversity-loss-and-doomsday-clock-invisible-disaster-almost-no-one-talking-about) have found that some 20 percent of all reptile species, 48 percent of the world’s primates, and 50 percent of freshwater turtles are threatened. Underwater, about 10 percent of all coral reefs are now dead, and another 60 percent are in danger of dying.

Consistent with these data, the 2014 [Living Planet Report](http://bit.ly/1ssxx5m) shows that the global population of wild vertebrates dropped by 52 percent in only four decades—from 1970 to 2010. While biologists often avoid projecting historical trends into the future because of the complexity of ecological systems, it’s tempting to extrapolate this figure to, say, the year 2050, which is four decades from 2010. As it happens, a 2006[study](http://science.sciencemag.org/content/314/5800/787) published in Science does precisely this: It projects past trends of marine biodiversity loss into the 21st century, concluding that, unless significant changes are made to patterns of human activity, there will be virtually no more wild-caught seafood by 2048.

48% of the world’s primates are threatened with extinction.

Catastrophic consequences for civilization.

The consequences of this rapid pruning of the evolutionary tree of life extend beyond the obvious. There could be surprising effects of biodiversity loss that scientists are unable to fully anticipate in advance. For example, prior research has shown that localized ecosystems can undergo abrupt and irreversible shifts when they reach a tipping point. According to a 2012 [paper](http://www.nature.com/nature/journal/v486/n7401/full/nature11018.html) published in Nature, there are reasons for thinking that we may be approaching a tipping point of this sort in the global ecosystem, beyond which the consequences could be catastrophic for civilization.

As the authors write, a planetary-scale transition could precipitate “substantial losses of ecosystem services required to sustain the human population.” An ecosystem service is any ecological process that benefits humanity, such as food production and crop pollination. If the global ecosystem were to cross a tipping point and substantial ecosystem services were lost, the results could be “widespread social unrest, economic instability, and loss of human life.” According to Missouri Botanical Garden ecologist Adam Smith, one of the paper’s co-authors, this could occur in a matter of decades—far more quickly than most of the expected consequences of climate change, yet equally destructive.

Biodiversity loss is a “threat multiplier” that, by pushing societies to the brink of collapse, will exacerbate existing conflicts and introduce entirely new struggles between state and non-state actors. Indeed, it could even fuel the rise of terrorism. (After all, climate change has been [linked](http://thebulletin.org/climate-change-and-syrian-uprising) to the emergence of ISIS in Syria, and multiple high-ranking US officials, such as former US Defense Secretary [Chuck Hagel](http://www.defense.gov/News-Article-View/Article/603441)and CIA director [John Brennan](http://www.cnsnews.com/news/article/cnsnewscom-staff/cia-director-cites-impact-climate-change-deeper-cause-global), have affirmed that climate change and terrorism are connected.)

The reality is that we are entering the sixth mass extinction in the 3.8-billion-year history of life on Earth, and the impact of this event could be felt by civilization “in as little as three human lifetimes,” as the aforementioned 2012 Nature paper notes. Furthermore, the widespread decline of biological populations could plausibly initiate a dramatic transformation of the global ecosystem on an even faster timescale: perhaps a single human lifetime.

The unavoidable conclusion is that biodiversity loss constitutes an existential threat in its own right. As such, it ought to be considered alongside climate change and nuclear weapons as one of the most significant contemporary risks to human prosperity and survival.