

TRAPPED IN THE GODDESS’S MOUSETRAP: EQUITABLE SOLUTIONS FOR POVERTY POACHING OF VENUS FLYTRAPS

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Abstract

Most discussions of poaching—the intentional, unlawful taking or killing of a living organism—focus on animals. However, poaching is also the primary threat for many prized collectible plants. The bizarre Venus flytrap has particularly drawn media attention as North Carolina struggles to save its endemic State Carnivorous Plant from extinction. Existing federal plant protection laws are sparse and either ineffective (in the case of the Endangered Species Act) or underutilized (in the case of the Lacey Act). Traditional poaching enforcement methods, which target individual poachers with small fines, are designed for animal poaching, and fail to adequately protect plants. Not only do enforcement officers have difficulty finding plant poachers, but poverty, drug use, and cultural traditions often provide incentives that small fines do little to deter. North Carolina has taken one alternative approach by increasing deterrence through stricter penalties, including jail time. Another alternative approach is using the Lacey Act to enforce state laws, as modeled by a maple-poaching case in Washington State. This comment argues that a combination of these two approaches may best protect the Venus flytrap—and avoid the inequities of traditional enforcement—by targeting upstream buyers and resellers of poached plants with more severe penalties.

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I. INTRODUCTION

The crimson jaws—a tiny bloodstain against green shadows—gape patient, still, with trigger hairs waiting. An insect lands, explores the curious color, brushes against one hair, then two, signaling fearsome interlocking “teeth” to snap shut around it.² The swift ambush of the carnivorous Venus flytrap (*Dionaea muscipula*)³ has long captured the wonder and horror of both science and fiction.⁴ Yet, this ferocious-looking plant is itself the delicate victim of its own predator, who crawls patiently through bogs with spoon and trowel in hand: the poacher.⁵

2. Ed Yong, *Venus Flytraps Are Even Creepier Than We Thought*, THE ATLANTIC (Jan. 21, 2016), <http://www.theatlantic.com/science/archive/2016/01/the-venus-fly-trap-counts-the-struggles-of-its-prey/424782/> [https://perma.cc/48GV-LGE7].

3. The Latin name translates literally as Diana's (the mother of Venus)'s mousetrap. See LATIN DICTIONARY, <https://www.online-latin-dictionary.com/> [https://perma.cc/RL72-Y7ZQ] (search each word individually) (last visited Apr. 28, 2018).

4. See, e.g., CHARLES DARWIN, INSECTIVOROUS PLANTS 286 (1899) (describing the Venus flytrap as “one of the most wonderful in the world”); THE LITTLE SHOP OF HORRORS (Filmgroup 1960) (imagining a huge, human-eating version of the flytrap).

5. Historically, “poaching” has not extended to plants. See, e.g., *Poaching*, BLACK'S

The Venus flytrap—the only species of flytrap in the world, native only to a small section of North and South Carolina⁶—has captured recent media attention as the swiftly disappearing victim of poverty-driven poachers looking for quick cash in a collection-driven market.⁷ Its plight has spurred North Carolina to increase the penalty of taking wild Venus flytraps from a misdemeanor to a felony.⁸ In 2016, nationwide plant specialists petitioned for its listing under the Endangered Species Act (ESA), which is still pending review.⁹ Though these actions are too recent to tell how effectively they may prevent Venus flytrap poaching, other plants under similar poaching threats, like maple trees and ginseng, provide some useful comparators.

The legal landscape around poaching focuses on animals, largely ignoring the havoc that poaching wreaks on prized collector plants, including carnivorous plants. Part I of this

LAW DICTIONARY (10th ed. 2014) (using a 17th century definition of the term: “The illegal taking or killing of fish or game on another’s land.”). Now, plants may be included as protected “species,” such as in the Endangered Species Act (ESA). *See* Endangered Species Act of 1973 § 3(16), 16 U.S.C. § 1532(16) (2012). However, the modern legal term “taking/take” often has a much broader meaning that encapsulates even unintentional harm, including “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” *Id.* § 3(19). This comment adopts a middle ground of common usage, defining plant poaching as the intentional killing or taking—including collecting—of plants in knowing violation of any law.

6. James Affolter et al., *Petition to List the Venus Flytrap (Dionaea muscipula Ellis) as Endangered Under the 1973 Endangered Species Act* 7 (Oct. 21, 2016), <https://ecos.fws.gov/ecp/report/table/petitions-received.html> [<https://perma.cc/F2V2-3GXP>].

7. *See, e.g.*, Phoebe Judge, *Dropping Like Flies*, CRIMINAL (Apr. 24, 2014) <http://thisiscriminal.com/episode-five-dropping-like-flies-4-24-2014/> [<https://perma.cc/SH6G-H8FL>]; Elizabeth Shockman, *The Little-Known World of Endangered Plant Poaching*, PUB. RADIO INT’L (Nov. 30, 2015, 8:45 AM), <http://www.pri.org/stories/2015-11-30/little-known-world-endangered-plant-poaching> [<https://perma.cc/2ZC8-5KP8>].

8. N.C. GEN. STAT. § 14-129.3 (2014).

9. Affolter et al., *supra* note 6. As of the publication of this comment, this petition has survived the U.S. Fish and Wildlife Service’s (USFWS) “90-day finding” (which took fourteen months) that it “present[s] substantial scientific or commercial information indicating” that the flytrap may warrant listing. Endangered and Threatened Wildlife and Plants; 90-Day Findings for Five Species, 82 Fed. Reg. 60,362, 60,366 (Dec. 20, 2017). The USFWS is currently undergoing its required 12-month review of whether listing the species is warranted. *Id.* Updates available at: <https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=7142> [<https://perma.cc/8VSD-GL7H>].

paper describes why plant poaching needs more attention and demonstrates the sparsity of United States federal law on the issue, using the Venus flytrap as a focal point.

Part II focuses on the human element of plant poaching and the motives behind it. First, this comment coins and defines “poverty poaching” as the intentional taking or killing of a wild plant or animal done for the primary purpose of making needed income—regardless of other possible motives—but *not* including organized crime. Second, Part II defines traditional enforcement methods as catching individual poachers in the act and assessing small fines and explores why these methods fail both plants and people.

Other plant poaching cases provide examples of alternative methods to traditional enforcement in Part III. First, North Carolina has started using harsher penalties—including jail time—for some of the more egregious ginseng and flytrap poachers. Second, federal prosecutors in Washington State utilized provisions of the Lacey Act to enforce state law against a mill owner who knowingly bought poached lumber.¹⁰

Part IV draws these examples together, explores their relative strengths and weaknesses, and argues that using a combination of both stricter penalties and the Lacey Act to incorporate state laws against high-profile upstream resellers provides a more equitable approach to protecting the Venus flytrap and other threatened plants.

II. POACHING IS AN OFTEN IGNORED BUT SERIOUS THREAT TO COLLECTIBLE PLANTS

Despite the public focus on celebrity animal species such as elephants, many species of plants are also threatened by mass poaching.¹¹ Plants that are particularly vulnerable are those highly prized by collecting communities, like rare orchids¹² or

10. Indictment at 7, *United States v. J & L Tonewoods*, No. 3:15-cr-05350 (W.D. Wash. July 23, 2015) [hereinafter *J & L Tonewoods Indictment*].

11. *E.g.*, Natasha Gilbert, *Habitat Loss Is the Biggest Hazard to Plant Biodiversity*, NATURE (Sept. 28, 2010), <http://www.nature.com/news/2010/100928/full/news.2010.499.html> [<https://perma.cc/T5QZ-4WQ9>] (pointing out that although 20% of plant species are at risk of extinction—putting them under greater threat than birds—the first global risk assessment was not conducted until 2010).

12. *See* ROYAL BOTANIC GARDENS KEW, STATE OF THE WORLD'S PLANTS 2017, at 83 (2017), https://stateoftheworldsplants.com/2017/report/SOTWP_2017.pdf (noting the

lichens.¹³ Within the plant kingdom, carnivorous plants are some of the most targeted oddities, and among them the truly unique Venus flytrap is one of the most threatened by poaching. Yet, the United States' legal system has been slow to recognize plant poaching at all. The two main comprehensive statutes that furnish plant poaching protections are the ESA and the Lacey Act. The ESA—a success for many animals—is largely ineffective for plants. The Lacey Act, while slow to encompass plants, now offers stronger legal protections, though such protections are underutilized.

A. Poaching is a Major Threat to Carnivorous Plants

Carnivorous plants are fascinating exemplars of evolutionary adaptation to unyielding environments. They can thrive in areas of nutrient-starved soils where few other plants can survive, but also can be overwhelmed by other plants that outcompete them for light.¹⁴ They have evolved into seventeen genera (categories of similar species), all of which capture insects or other animals to make up for a lack of soil nutrients using two general methods: snap traps and passive snares, like sticky traps.¹⁵ The waterwheel (*Aldrovanda vesiculosa*) and the Venus flytrap (*Dionaea muscipula*) are the only two species that evolved snap traps.¹⁶ Each is a monotypic genus—

International Union for the Conservation of Nature's Red List assesses orchids as "Vulnerable" because they are highly collected); see also SUSAN ORLEAN, *THE ORCHID THIEF* (Ballantine Books 13th ed. 2000) (1998) (narrating the eccentric underworld of illegal orchid collecting).

13. Endangered and Threatened Wildlife and Plants; Determination that Designation of Critical Habitat Is Not Prudent for the Rock Gnome Lichen, 66 Fed. Reg. 51,445, 51,447 (Oct. 9, 2001) [hereinafter Rock Gnome Lichen Determination] (detailing the devastation of rampant collecting on this endangered species, including the account of Dr. Paula DePriest who "observed that the type locality for rock gnome lichen was virtually wiped out by lichenologists who collected them during a field trip, in spite of the fact that this collection occurred within a national park and was not permitted.").

14. David E. Jennings & Jason R. Rohr, *A Review of the Conservation Threats to Carnivorous Plants*, 144 *BIOLOGICAL CONSERVATION* 1356, 1357 (2011).

15. *Id.*; Simon Poppinga et al., *Trap Diversity and Evolution in the Family Droseraceae*, 8 *PLANT SIGNALING & BEHAV.* 1, 1 (2013).

16. Poppinga et al., *supra* note 15, at 1. "Snap trap" refers to the mechanism by which the Venus flytrap rapidly 'snaps' closed by electrical signals triggered when insects touch small hairs that line the flytrap's crimson "mouth." Affolter et al., *supra* note 6, at 9; Yong, *supra* note 2.

meaning each represents the only existing species in the world like itself, the waterwheel being the only underwater snap trap, and the flytrap being the only terrestrial snap trap.¹⁷ Wild Venus flytraps grow in only one spot on the globe: the coastal plains of southeast North Carolina and a small patch in northeast South Carolina.¹⁸

The peculiarity of carnivorous plants is not their only value. Some pitcher plants may host entire communities of animals that exist nowhere else, including tiny frogs floating in their sticky, semi-transparent bulbs.¹⁹ Carnivorous plants, as a whole, also eat biting and stinging insects and their eggs, reducing populations of mosquitos, horseflies, and other pests that spread human diseases.²⁰

Carnivorous plants experience threats differently from other plants. While carnivorous plants share many of the most common threats to plants globally—including habitat loss, climate change, and invasive species²¹—poaching looms as a much bigger threat to carnivorous plants.²² Of the 102 carnivorous plant species evaluated by the International Union for the Conservation of Nature, fifty-six percent are considered threatened.²³ “Overcollecting” (including legal and illegal methods) is the second most common threat to carnivorous plants overall, and is *the* biggest threat to pitcher plants.²⁴ Overcollecting is a “particularly common threat” for the Venus

17. Poppinga et al., *supra* note 15, at 1; *Genus*, ENCYCLOPAEDIA BRITANNICA, <https://www.britannica.com/science/genus-taxon> [<https://perma.cc/X5FJ-DB8L>] (last updated Apr. 20, 2017).

18. Affolter, *supra* note 6, at 7, 11.

19. Jennings & Rohr, *supra* note 14, at 1357.

20. *Id.*

21. *Compare* ROYAL BOTANIC GARDENS KEW, *supra* note 12, at 42–71 (discussing that the most pressing global threats to plants are climate change, wildfires, invasive species, and pests) *with* Jennings & Rohr, *supra* note 14, at 1358–59 (identifying common threats to carnivorous plants including habitat loss from agriculture, aquaculture, harvesting, collecting, invasive species, pollution, and habitat modification including fires).

22. Jennings & Rohr, *supra* note 14, at 1359 (“[O]ver-collection in particular seems to be a much greater threat to carnivorous plants when compared with most other taxa.”).

23. *Id.* at 1357.

24. *Id.* at 1359 (noting that pitcher plant species “were predominantly affected by over-collection”).

flytrap as well.²⁵

The Venus flytrap is relatively easy to grow, and most commercially sold plants come from legitimate growers.²⁶ However, its popularity still proves tantalizing for poachers of wild flytraps, who can steal and sell hundreds or thousands of plants at a time for about \$0.25 each.²⁷

B. Existing Plant Protection Laws Are Piecemeal and Underutilized

The law has been slow to seriously recognize poaching threats to plants, as demonstrated by their weaker protections compared to animals in the Lacey Act and the ESA. Some relatively recent additions to these two laws have improved plant protections, at least on paper. However, some plants that are highly prized by collectors continue to suffer devastating losses that these laws have done little to prevent—so far.

1. The Endangered Species Act Operates Ineffectively in Protecting Plants

The ESA, while historically providing strict protections for listed animal species,²⁸ does not extend the same level of protection to plants.²⁹ First, the ESA prohibits takings of endangered or threatened “fish or wildlife” (encompassing all animal species)³⁰ from any area in the United States,³¹ including private land,³² but plant takings are only prohibited

25. *Id.*

26. Affolter et al., *supra* note 6, at 7, 9 (noting that commercial propagation is so common that “[m]ore plants exist in captivity now than exist in the wild”).

27. See Sarah Zielinski, *Back Away from the Carnivorous Plant!*, SMITHSONIAN (Apr. 11, 2011), <https://www.smithsonianmag.com/science-nature/back-away-from-the-carnivorous-plant-176740710/> [<https://perma.cc/EX7J-PHKL>] (“[C]ustoms agents at Baltimore-Washington International Airport once intercepted a suitcase containing 9,000 poached flytraps bound for the Netherlands . . .”).

28. See, e.g., *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 174 (1978) (“Congress intended endangered species to be afforded the highest of priorities.”)

29. Zygumunt J.B. Plater, *In the Wake of the Snail Darter: An Environmental Law Paradigm and Its Consequences*, 19 U. MICH. J.L. REFORM 805, 830–31 (1986).

30. Endangered Species Act § 3, 16 U.S.C. § 1532(8) (2012).

31. See *id.* § 9(a)(1).

32. See, e.g., *Gibbs v. Babbitt*, 214 F.3d 483, 497 (4th Cir. 2000).

on federal land.³³ Second, prohibited taking of animals includes unintentional acts like habitat modification,³⁴ but taking of plants requires either retaining possession or knowingly violating a state law, thereby excluding acts like vandalism.³⁵ Third, enforcement of protections for listed plants may also be inadequate. For example, in 2011, biologists at the University of Notre Dame found “around ten percent” of ESA-listed plant species illegally available for sale online.³⁶

At a basic level, the structure of the ESA may not be well-suited to protecting plants: the U.S. Fish and Wildlife Service (USFWS) has declined to extend critical habitat protections to almost all listed plant species, largely because the very act of publicly declaring the species' habitats puts them at even *more* risk of being collected.³⁷ Some conservationists even take matters into their own hands, physically transplanting listed plants outside their natural ranges, which can unfortunately spread diseases and invasive species.³⁸ Finally, and notably true in the Venus flytrap's case thus far, the ESA does not help rare plants until they are in imminent danger of extinction.³⁹

33. Endangered Species Act, § 9(a)(2); *see also* 50 C.F.R. § 17.61(c)(1) (2017) (prohibited plant takings added in 1982); *see also* Kevin E. Regan, *The Need for a Comprehensive Approach to Protecting Rare Plants: Florida as a Case Study*, 44 NAT. RESOURCES J. 125, 140–41 (2004).

34. 50 C.F.R. § 17.3 (2017).

35. Regan, *supra* note 33, at 141.

36. Nell Greenfieldboyce, *A Growing Risk? Endangered Plants for Sale Online*, NPR (Feb. 7, 2011 12:10 PM), <https://www.npr.org/2011/02/07/133565494/a-growing-risk-endangered-plants-for-sale-online> [<https://perma.cc/2T8E-6JU7>].

37. Conservation Council for Haw. v. Babbitt, 2 F. Supp. 2d 1280, 1280–81 (D. Haw. 1998) (“Since the enactment of the ESA, the [USFWS] has listed approximately 700 plants nationwide as endangered or threatened. Of those 700 plants, the [USFWS] has designated a critical habitat for twenty-four.”); *see also* Rock Gnome Lichen Determination, *supra* note 13, at 51,448 (finding that “attracting moss collectors to watersheds designated as sanctuaries and occupied by the endangered lichen could result in devastating incidental collection of the listed species”).

38. *See* Greenfieldboyce, *supra* note 36; Amina Khan, *Carnivorous Plants Losing Ground in the U.S.*, L.A. TIMES (Sept. 7, 2010) <http://articles.latimes.com/print/2010/sep/07/science/la-sci-carni-plants-20100908> [<https://perma.cc/XZ8B-97DB>].

39. Regan, *supra* note 33, at 137 (contrasting how the broader body of wildlife law “considers the overall health of species populations” to sustainably manage game resources with the fact that most plant protections are relegated to the ESA and other laws that “fail to protect a plant species before its population has declined to the point of being threatened or endangered”).

2. *The Lacey Act's Plant Protections Are Relatively Recent and Underutilized*

The Lacey Act, created in 1900 to federalize state poaching crimes, was originally restricted to narrow categories of animals that did not even include fish.⁴⁰ Throughout the next century, the Lacey Act's definitions expanded to include most types of fish and wildlife, and expanded federal reach over importing animals in violation of foreign law as well.⁴¹ Plants, however, were excluded from most of the Lacey Act's protections, and as of 1982, the definition of "plant" was narrowly limited to "any wild member of the plant kingdom, including roots, seeds, and other parts thereof (but excluding common food crops and cultivars)."⁴² Up until 2008, the Lacey Act only prohibited violations of federal, tribal, and state plant laws.⁴³

In 2008, Congress amended the Lacey Act to significantly expand protections of plants as part of the Food, Conservation, and Energy Act of 2008.⁴⁴ Congress expressed two reasons for expanding plant protections: to protect the ecosystem, and to bolster the U.S. timber industry by preventing unfair competition from illegal forestry.⁴⁵ The 2008 amendments

40. Trevor Krost, Note, *The World's Laws in American Justice: The Foreign Law Provisions of the 2008 Lacey Act Amendments*, 8 PITT. J. ENVTL. PUB. HEALTH L. 55, 58 (2013).

41. *Id.* at 58–59.

42. Lacey Act, 16 U.S.C. § 3371(f) (1982). Though neither "common food crops" nor "cultivars" are defined in the Lacey Act, the U.S. Department of Agriculture defined them in regulation after the 2008 amendments. See Lacey Act Implementation Plan; Definitions for Exempt and Regulated Articles, 78 Fed. Reg. 40,940, 40,940 (interim final rule July 9, 2013) (codified at 7 C.F.R. pt. 357).

43. 16 U.S.C. § 3372(a)(1), (a)(2)(B), (a)(3)(B) (prohibiting "any person to import, export, transport, sell, receive, acquire, or purchase" a plant "taken or possessed in violation of any law, treaty, or regulation of the United States or in violation of any Indian tribal law," or "taken, possessed, transported, or sold in violation of any law or regulation of any State," and prohibiting the possession within a maritime or territorial U.S. jurisdiction of "any plant taken, possessed, transported, or sold in violation of any law or regulation of any State"); see also Krost, *supra* note 40, at 59.

44. Pub. L. No 110-234 § 8204, 122 Stat. 1291 (2008). The Food, Conservation, and Energy Act of 2008 spanned a vast array of new and amended statutes; the amendments to the Lacey Act were included in the section on "Prevention of Illegal Logging Practices." *Id.*

45. KRISTINA ALEXANDER, CONG. RESEARCH SERV., R42067, THE LACEY ACT: PROTECTING THE ENVIRONMENT BY RESTRICTING TRADE 2 (2014).

strengthened plant protections in two main ways. First, they broadened the definition of plants to include products made from plants and “trees from either natural or planted forest stands.”⁴⁶ Previously, the Lacey Act protected *only* those plants (not including trees) indigenous to the U.S. and listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the ESA, or a state endangered species law.⁴⁷ “Common cultivars” and “common food crops” are still excluded, though the amendment expressly excludes trees from common cultivars.⁴⁸ The U.S. Department of Agriculture later defined these two terms in regulation: A “common cultivar” is a plant (not including trees) that has been artificially developed, and a “common food crop” is a plant grown for human or animal consumption.⁴⁹ Both common cultivars and common food crops must also be produced on a commercial scale and not be listed in CITES, the ESA, or a state endangered species list to be excluded from the Lacey Act.⁵⁰

The provision in the Lacey Act extending enforcement to state laws existed before the 2008 expansions, but few cases invoked the provision for plants. In 1992, the Ninth Circuit affirmed a Lacey Act conviction of a man who sold a saguaro cactus in violation of the Arizona Native Plant Law.⁵¹ In 1995, the Northern District of Ohio dismissed twenty-nine Lacey Act charges against two defendants for violating a state ginseng permit law, on the grounds that ginseng is “more like a food than a medicine,” and is thereby excluded from the Lacey Act.⁵² After the 2008 amendments, the Fourth Circuit subsequently upheld (on other grounds) a one-year prison sentence and \$50,000 fine under the Lacey Act for a defendant’s guilty plea to transporting ginseng in violation of

46. Lacey Act, Pub. L. No. 110-246, § 8204(a)(1), 122 Stat. 2052, 2052–53 (2008) (codified as amended at 16 U.S.C. § 3371(f)(1) (2012)).

47. Lacey Act, 16 U.S.C. § 3371(f) (1982).

48. Lacey Act, 16 U.S.C. § 3371(f)(2)(A) (2012). Also excluded are scientific specimens and transplants. *Id.* § 3371(f)(2)(B), (C).

49. 7 C.F.R. § 357.2 (2017).

50. *Id.*

51. *United States v. Miller*, 981 F.2d 439, 441–42 (9th Cir. 1992).

52. *United States v. McCullough*, 891 F. Supp. 422, 426–27 (N.D. Ohio 1995). Note that this case was decided before these terms were defined.

North Carolina law, but did not discuss whether ginseng is excluded or not.⁵³ Because there have been so few cases using the Lacey Act in conjunction with state law, the question of whether wild ginseng falls within the Lacey Act's current protections is still unclear.

The second way the 2008 amendments strengthened plant protections was by adding violations of foreign plant laws.⁵⁴ Previously, only violations of animal-related foreign laws fell under the Lacey Act.⁵⁵ Included in these foreign law provisions is a requirement that plant importers declare a list of scientific names, descriptions, and quantities of imported plants, as well as the plants' country of origin.⁵⁶ These foreign-law requirements have subsequently been used to some acclaim—and notoriety—against large-scale importers of poached lumber. For example, the USFWS raided Gibson Guitars in 2011 for importing rare ebony and rosewood in violation of Indian and Malagasy laws.⁵⁷ The company ultimately settled, and criminal charges were dropped in exchange for over \$600,000 in civil penalties and forfeitures.⁵⁸

The relative successes of these foreign-law Lacey Act cases could be examples for a revitalization of using the state-law provisions to target the more egregious upstream buyers and resellers of poached plants. One case out of Washington State, discussed in Part III below, serves as a model of using the Lacey Act in exactly this way. The power of the Lacey Act to amplify state laws should be used carefully, however. Poachers take plants for a variety of reasons, and those who poach out of financial necessity often bear unequal burdens of penalties. In any potential case, prosecutors must start with a foundational understanding of the role of poverty on poaching.

53. *United States v. Ledford*, 389 Fed. App'x. 259, 259–60 (4th Cir. 2010) (holding that defendant validly waived his right to appeal his sentence, and not reaching his claim of ineffective assistance of counsel).

54. ALEXANDER, *supra* note 45, at 4–6.

55. Lacey Act, Pub. L. No. 110-246, § 8204(b)(1), 122 Stat. at 2053–54 (2008) (codified as amended at 16 U.S.C. § 3372(a) (2012)). For greater discussion on the implications of applying the Lacey Act to foreign timber laws, see Krost, *supra* note 40, at 70–77.

56. *Id.* § 8204(b)(2), 122 Stat. at 2054 (codified as amended at 16 U.S.C. § 3372(f) (2012)).

57. ALEXANDER, *supra* note 45, at 14–18.

58. *Id.* at 18.

III. POVERTY POACHING REQUIRES MORE EQUITABLE SOLUTIONS

Poaching laws and traditional enforcement mechanisms have historically neglected plants, leaving species that are highly prized by collectors as vulnerable prey. Meanwhile, sellers can reap massive profits⁵⁹ from taking advantage of a system where their commodity is nearly untraceable, and what mild criminal risk exists falls almost exclusively on the individual poacher. This system not only fails plants but also perpetuates inequities against the people involved. In order to find more practical solutions, we must first understand what motivates poachers to take plants, and how traditional enforcement is insufficient.

A. *Understanding Poverty Poaching*

A certain American mystique swirls behind the pioneer outlaw, the rugged mountain family living by their wits, grit, and familiarity with untamed forests, swamps, or deserts. The idea of a self-sustaining individualist has a folk-hero appeal, a Robin Hood ideal of surviving by fish, deer, fruit, or clam taken from an oppressive noble's elitist claim of ownership.⁶⁰ Though the government, environment, technology, and society have drastically changed, the romanticized ideal persists and spreads through family lines, cultures, and even modern entertainment, as exemplified in reality television shows like *Rugged Justice*⁶¹ and *Appalachian Outlaws*.⁶² This folk-crime romanticism of poaching is one of many motives that scholars attribute to poachers.

59. For example, a single flytrap purchased from a poacher for \$0.25 has a resale value of about \$10. Shockman, *supra* note 7.

60. See, e.g., Erica von Essen et al., *Deconstructing the Poaching Phenomenon: A Review of Typologies for Understanding Illegal Hunting*, 54 BRIT. J. CRIMINOLOGY 632, 641–42 (2014) (summarizing the resistance aspect of eighteenth-century English poaching).

61. *Rugged Justice*, ANIMAL PLANET, <https://www.animalplanet.com/tv-shows/rugged-justice/> [<https://perma.cc/C4BG-YGEG>] (last visited Feb. 8, 2018) (following wildlife enforcement agents in various states).

62. *Appalachian Outlaws*, HISTORY, <http://www.history.com/shows/appalachian-outlaws> [<https://perma.cc/7KV7-TTPC>] (last visited Feb. 8, 2018) (following ginseng diggers, or “sangers,” and their buyers).

Poaching enterprises arise from a variety of motives and employ a range of coordination and sophistication. At the apex of danger is the organized crime poacher—the large conspiracy of natural resource trafficking that often is a stepping-stone or a parallel to arms, drug, and human trafficking.⁶³ These enterprises may be global in scope, and a great deal of legal and public attention has put spotlights on the poaching of big game such as elephants, tigers, and rhinos.⁶⁴ Localized criminal rings may garner less fevered attention, but nevertheless devastate communities. For example, the lobster mafia in the Northeast U.S. and Southeast Canada operates as a “business enterprise” of commercial fishers overlapping legal and illegal lobstering on such a large scale that other fishers cannot or will not interfere, putting most of the burden of preventing overfishing on state entities.⁶⁵ Such large-scale criminal enterprises are beyond the scope of this paper; rather, this paper focuses on poverty-driven motives for poaching on an individual scale.

Researchers have created a panoply of terms to describe the often overlapping complexity of poaching motives: “ignorance,” “recreational satisfaction[,],” “trophy poaching,”⁶⁶ “sociopolitical resistance,”⁶⁷ “tradition,” the “exhilaration” of doing something illegal⁶⁸—even psychopathic “thrill killing.”⁶⁹ One of the less

63. Ruth A. Braun, *Lions, Tigers and Bears (Oh My): How to Stop Endangered Species Crime*, 11 FORDHAM ENVTL. L. J. 545, 563 (2000) (“Many organized crime rings that trade in wildlife also trade in drugs and weapons. They use the same methods of transport and the same trafficking routes to conduct both illegal businesses.”).

64. *See id.* at 559–60, 569–70 (assessing the effectiveness of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in combatting African elephant poaching and Asian tiger poaching); Ellen McDonald, *Too Big to Fail: Rescuing the African Elephant*, 40 FLETCHER F. WORLD AFF. 113 (2016); Kofi Ernest Abotsi et al., *Wildlife Crime and Degradation in Africa: An Analysis of the Current Crisis and Prospects for a Secure Future*, 27 FORDHAM ENVTL. L. REV. 394 (2016) (describing the history and outlook of elephant, rhinoceros, lion, and other big-game poaching in Sub-Saharan Africa).

65. John L. McMullan & David C. Perrier, *Lobster Poaching and the Ironies of Law Enforcement*, 36 L. & SOC'Y REV. 679, 688–89 (2002).

66. Stephen L. Eliason, *Accounts of Wildlife Law Violators: Motivations and Rationalizations*, 9 HUM. DIMENSIONS WILDLIFE 119, 122–25 (2004).

67. von Essen et al., *supra* note 60, at 641.

68. Craig J. Forsyth et al., *The Game of Poaching: Folk Crimes in Southwest Louisiana*, 11 SOC'Y & NAT. RESOURCES 25, 30 (1998).

69. Robert M. Muth & John F. Bowe Jr., *Illegal Harvest of Renewable Natural Resources in North America: Toward a Typology of the Motivations for Poaching*, 11

inflammatory and more common motives for poaching is for subsistence food or money, usually out of economic desperation.⁷⁰ For this category of motives, scholars have varied in their approaches—some distinguish between those who eat the poached animal or plant and those who sell it,⁷¹ while others distinguish between those who sell poached products to buy necessities and those who sell in conjunction with other minor crimes, often purchasing drugs.⁷² In reality, as with most aspects of human behavior, an individual's personal motives are rarely so singularly clear-cut. Poaching motives often overlap—an individual may poach out of both financial necessity *and* out of an idealized folk-hero attitude, for example.⁷³ Because isolating motives to such a fine degree is unrealistic, this comment defines “poverty poaching” to include all types of individual-scale poaching (thereby excluding organized crime) primarily motivated by financial necessity, whether combined with other motives or not.

Poverty has long been intuitively linked with poaching, though more empirical evidence is needed to flesh out the gaps in our piecemeal understanding.⁷⁴ Many studies focus on wildlife, particularly big-game species like elephants,⁷⁵ that have gained worldwide support from animal lovers. Understanding the motivations and real economic drivers

SOC'Y & NAT. RESOURCES 9, 9 (1998).

70. von Essen et al., *supra* note 60, at 640 (“Livelihood crimes are seen as motivated by economic factors and are often attributed as the most prevalent acts of illegal hunting.”).

71. *E.g.*, Forsyth et al., *supra* note 68, at 30–31.

72. *E.g.*, Michael R. Pendleton, *Taking the Forest: The Shared Meaning of Tree Theft*, 11 SOC'Y & NAT. RESOURCES 39, 47–48 (1998) [hereinafter Pendleton, *Tree Theft*].

73. von Essen et al., *supra* note 60, at 642 (“Boundaries between livelihood crimes, folk crimes and social crimes are rarely discrete.”).

74. Rosaleen Duffy & Freya A. V. St. John, *Poverty, Poaching and Trafficking: What Are the Links?*, EVIDENCE ON DEMAND 3–4 (2013), https://assets.publishing.service.gov.uk/media/57a08a18ed915d622c000567/EoD_HD059_Jun2013_Poverty_Poaching.pdf [<https://perma.cc/9D2K-QKRS>] (making key findings that “[w]e need a much better understanding of the relationships between poverty and individual poacher motivation” and “[t]he evidence base for claims around poverty as a driver of ivory and rhino poaching is thin, but that does not mean that poverty is not an important factor”).

75. *See, e.g.*, Andrew M. Lemieux & Ronald V. Clarke, *The International Ban on Ivory Sales and Its Effects on Elephant Poaching in Africa*, 49 BRIT. J. CRIMINOLOGY 451 (2009).

behind poaching would enable effective political and legal strategies for combatting the poaching itself, as well as the underlying poverty.

For example, the CITES 1989 ban on the international trade of ivory may have helped reduce elephant poaching in some African countries, depending on their domestic ivory markets.⁷⁶ However, some experts argue that the resulting increase in black market prices did nothing to demotivate poachers.⁷⁷ Parallel to those successes, some African communities have actually gained multi-level, cooperative economic growth from the illegal ivory trade driven by high demand from wealthier areas.⁷⁸ Contrastingly, ivory poaching in other areas has been driven primarily by poverty—especially areas caught in violent conflicts—and the rise of organized ivory trafficking in turn creates even more local poverty.⁷⁹ Many terror groups, such as Al-Shabaab, finance their operations through illegal plant and animal trade, exploiting local populations to poach for them through recruitment, threats, and bribes.⁸⁰

But poverty poaching does not always, or perhaps not even usually, involve such global stakes. A majority of surveyed Cajun poachers in Louisiana said they take wild game at times when they could not afford food: “When you’re hungry, you got to have some food, so [you] outlaw and that’s the truth.”⁸¹ Tree poaching increased in the Pacific Northwest after forests were closed to protect the northern spotted owl; one researcher attributed the trend to out-of-work loggers desperate to “meet the basic requirements of life,” those with jobs but looking for “a quick route to a new pickup truck,” or those with criminal backgrounds looking for a “convenient way” to earn money, often in connection with drug use.⁸²

Thus, while the many distinct motives underlying poaching overlap like a messy quilt of culture and politics, economic

76. *Id.* at 453, 456, 459.

77. *Id.* at 456.

78. Duffy & St. John, *supra* note 74, at 3.

79. *Id.* at 5–6.

80. McDonald, *supra* note 64, at 115–16.

81. Forsyth et al., *supra* note 68, at 30.

82. Pendleton, *Tree Theft*, *supra* note 72, at 47–48.

concerns exert overwhelming pressure on individuals. The role of poverty on the first step of the criminal chain—the individual poacher—must not be minimized. Enforcement strategies for plant poaching will only be effective if they incorporate these financial concerns into the underlying legal framework.

B. Traditional Enforcement Against Plant Poaching Fails Both Plants and People

“Traditional enforcement methods” means those typically employed in animal poaching, i.e., punitive actions varying from minor citations to property seizure or, rarely, arrest against individuals caught in the act of poaching.⁸³ The first and perhaps most obvious reason that traditional enforcement methods fail plants is that they already have limited success in fish and wildlife poaching. Agents must catch poachers in the act or shortly after, such as in the stereotypical cases of a poacher hiding an untagged deer in a truck bed or slipping undersized fish into a hidden boat compartment. Even when tracking large animals like deer or bear, only a few resource-strapped enforcement officers are available to patrol vast regions: An Oregon State Police Fish and Wildlife Captain estimated that his enforcement agents only “detect about [ten] percent of poaching.”⁸⁴ A waterfowl poacher in Kentucky bragged to researchers: “I figure I’ve been caught once now out of 1,000 times.”⁸⁵ Officers may have to rely on decoys⁸⁶ or informants⁸⁷ to get meaningful results.

These same issues crop up in plant poaching enforcement

83. See, e.g., WASH. REV. CODE § 77.15.060 (2017) (classifying the range of fish and wildlife crimes from infractions to felonies); Steve Stuebner, *States Get Semi-Tough on Poachers*, HIGH COUNTRY NEWS (Apr. 28, 1997), <http://www.hcn.org/issues/108/3404> [<https://perma.cc/QB9Z-5H3Y>] (comparing variances in poaching enforcement penalties in Western states).

84. Tony Schick, *Many Poachers Uncaught, Lightly Punished in Northwest*, KCTS9 (May 18, 2015), <https://kcts9.org/programs/wildlife-detectives/many-poachers-uncaught-lightly-punished-in-northwest> [<https://perma.cc/QHT4-N3QX>].

85. Eliason, *supra* note 66, at 125.

86. Stuebner, *supra* note 83 **Error! Bookmark not defined.** (describing the practice of using deer decoys).

87. Schick, *supra* note 84 (narrating a thwarted sting operation in which Oregon officers relied on a dealer’s cooperation to prove some sold mule deer antlers were poached).

and are compounded by the ease with which poachers can sneak hundreds or thousands of small plants away in small backpacks.⁸⁸ One North Carolina Wildlife Resources Committee lieutenant literally stumbled over two camouflaged women lying on their bellies in the swamp; they had already dug up nearly 300 Venus flytraps.⁸⁹

The second reason why traditional methods are ineffective is that poaching is often legally under-prioritized. A spate of stricter wildlife poaching penalties popped up in several western states in the late 1990s,⁹⁰ but even in states like Washington and Oregon that impose relatively high fines and allow seizure of vehicles and gear, poaching can still eclipse enforcement efforts.⁹¹ Fines are often too small in relation to potential profits: for just a few examples, mussel poachers can make about \$250,000 a year from cultured pearls,⁹² a single bear gall bladder can sell for as much as \$10,000,⁹³ and a poacher could make \$5,000–\$10,000 by selling a single cedar to a mill.⁹⁴ As described above, the legal system often minimizes plant poaching even more than wildlife, despite its enormous costs.⁹⁵

88. Khan, *supra* note 38 **Error! Bookmark not defined.** (detailing cases in which a group of three men in North Carolina were caught with a backpack full of 500 poached purple pitcher plants); *United States v. Hurley*, No. 1:15-cr-00082-MR, 2015 BL 377137, at *3 (W.D.N.C. Nov. 16, 2015) (Hurley was caught with 515 ginseng roots hidden in a backpack).

89. Khan, *supra* note 38 **Error! Bookmark not defined.**

90. Stuebner, *supra* note 83 **Error! Bookmark not defined.**

91. Schick, *supra* note 84 **Error! Bookmark not defined.** (citing that “deer poaching happens at a higher rate in central Oregon than legal harvest” despite a possible \$7,500 fine); *see, e.g.*, WASH. REV. CODE § 77.15.094 (2017) (allowing fish and wildlife officers to search and seize property as evidence).

92. Eliason, *supra* note 66, at 126. By contrast, one example of a state fine for illegally harvested mussels is between \$400–\$950 for a first offense. LA. STAT. ANN. §§ 56:450, 56:34 (2018).

93. Schick, *supra* note 84 **Error! Bookmark not defined.** At the time of Schick’s article in 2015, bears were not even covered in Oregon’s wildlife penalties. *Id.* The law has since been amended so that unlawful taking or killing of black bears may lead to a \$7,500 civil penalty. OR. REV. STAT. § 496.705(2)(a)(D) (2017).

94. Pendleton, *Tree Theft*, *supra* note 72, at 46. In Washington, unlawfully possessing cedar or other “specialty wood” has a maximum penalty of \$1,000. WASH. REV. CODE §§ 76.48.021(23); 76.48.151 (2017).

95. *See generally* George Cameron Coggins & Anne Fleishel Harris, *The Greening of American Law?: The Recent Evolution of Federal Law for Preserving Floral Diversity*, 27 NAT. RESOURCES J. 247, 248–50 (1987) (outlining the magnitude of potential plant

Perhaps the most important aspect of poverty poaching is that it is almost never exclusively about the poverty. A person arrives at a state of poverty through a confluence of social circumstances that should not be analyzed in total isolation.⁹⁶ For example, although many known tree poachers in the Pacific Northwest are motivated by poverty and drug use, they may also be influenced by the larger context of logging communities still suffering from forest closures in the early 1990s partly due to the northern spotted owl's listing as an endangered species.⁹⁷ Violent protests followed the closures, including drive-by shootings of park ranger stations, an "arson committee," and mass forest cutting as civil disobedience.⁹⁸

Communities develop their own moral codes around using local natural resources that foster deep distrust of outsiders.⁹⁹ Merely imposing fines or arrest to deter economic incentives for poaching would not alleviate these other tensions. While some officers thereby prefer the "soft enforcement" or "social relations approach," there is danger in dismissing violence as merely "folk" crime just because it occurs in rural locations.¹⁰⁰ The law must take poaching seriously, for plants as well as wildlife, but not in isolation. A multi-tiered approach of stricter penalties and systems that can target dealers over individual poachers may help shift results to actually protecting more plants and putting pressure on market-drivers, rather than increasing the cycle of poverty.

species loss and the harm caused by loss of plant biodiversity); *see also* Forsyth et al., *supra* note 68, at 33 (listing reasons game wardens have given for selectively not enforcing poaching in general).

96. von Essen et al., *supra* note 60, at 633 (arguing that the "reductionist sketch" of rationalizing "illegal hunting" on the "level of the individual offender" "can pose a problem when creating countermeasures").

97. Michael R. Pendleton, *Crime, Criminals and Guns in "Natural Settings": Exploring the Basis for Disarming Federal Rangers*, 15 AM. J. POLICE 3, 13 (1996) [hereinafter Pendleton, *Guns*].

98. *Id.*

99. McMullan & Perrier, *supra* note 65, at 684; Forsyth et al., *supra* note 68, at 26 (describing how forest burning was morally acceptable or not depending on the local culture).

100. Pendleton, *Guns*, *supra* note 97, at 19, 22.

IV. TWO ALTERNATIVES TO TRADITIONAL PLANT POACHING ENFORCEMENT: HARSHER PENALTIES AND THE LACEY ACT

North Carolina law serves as an example of one alternative to small fines: stronger disincentives through harsher penalties. In one case, prosecutors have attempted to protect wild ginseng from the devastation a single, serial poacher can wreak by successfully requesting prison sentences. Additionally, in an effort to protect its iconic Venus flytrap, North Carolina passed a felony flytrap poaching penalty in 2014. A second alternative to small fines is using the Lacey Act's application to state plant laws that has lain relatively dormant. A recent Washington State case made use of this provision against a large-scale buyer of domestic poached lumber.¹⁰¹ This case may set a blueprint for disincentivizing intentional buyers of poached plants.

A. North Carolina's Stricter Plant Poaching Penalties

1. In the Case of Ginseng

"Sanging," the Appalachian folk tradition of gathering wild ginseng, presents a similar poaching situation to the Venus flytrap. Poverty poaching plays a distinct role: Increased out-of-season poaching may be linked with drug epidemics,¹⁰² and "the law hits some poor families harder."¹⁰³

The motives for poaching ginseng are also heavily influenced by folk custom.¹⁰⁴ Two recent reality TV shows have glorified

101. J & L Tonewoods Indictment, *supra* note 10, at 7–8**Error! Bookmark not defined.**

102. Kris Maher, *Demand for Ginseng Boosts Prices, Tempts Poachers; Medicinal Herb Grows Wildly in Appalachia and the Midwest*, WALL ST. J. (Sept. 17, 2014), <https://www.wsj.com/articles/demand-for-ginseng-boosts-prices-tempts-poachers-1410971637>.

103. See David Taylor, *The Fight Against Ginseng Poaching in the Great Smoky Mountains*, SMITHSONIAN (April 21, 2016), <http://www.smithsonianmag.com/science-nature/fight-against-ginseng-poaching-great-smoky-mountains-180958858/#5yt3dgupFdl5o7zV.99> [<https://perma.cc/CP58-HW6Q>] [hereinafter Taylor, *Great Smoky Mountains*].

104. Some experts link ginseng trade to George Washington and John Jacob Astor. Maher, *supra* note 102**Error! Bookmark not defined.** Even before then, the Iroquois used ginseng for centuries and helped the French start ginseng trade with China around 1715. Taylor, *Great Smoky Mountains*, *supra* note 103**Error!**

and exaggerated ginseng poaching.¹⁰⁵ Like the flytrap and figured maple, ginseng has a highly profitable market, particularly due to alternative medicine marketers who prize wild ginseng over cultivated ginseng.¹⁰⁶ According to prosecutor David Thorneloe, who handles many federal ginseng poaching cases, an experienced poacher can make hundreds of dollars in a day, or thousands on an extended trip.¹⁰⁷ Enforcement agents in areas where harvesting is restricted, like in North Carolina's Great Smoky Mountains National Park, struggle continuously against illegal "sangers" from communities who have harvested ginseng for generations.¹⁰⁸

One sanger in particular, Billy Joe Hurley, has become so notorious in the Great Smoky Mountains that he received a rare six-month prison sentence in 2015 for taking 500 ginseng roots—the maximum sentence for the misdemeanor of "[p]ossessing, destroying, injuring, defacing, removing, digging, or disturbing" ginseng under National Park Service regulation 36 C.F.R. § 2.1.¹⁰⁹ Hurley has been convicted five times for the same misdemeanor, and according to biologists in the Great Smoky Mountains, does "tremendous damage" by gathering entire swaths of ginseng in one watershed instead of isolated patches.¹¹⁰

Bookmark not defined..

105. Taylor, *Great Smoky Mountains*, *supra* note 102103**Error! Bookmark not defined.**

106. Maher, *supra* note 102**Error! Bookmark not defined.**; David Taylor, *Rare New Hampshire Plant More Precious than Ever*, NPR, <http://info.nhpr.org/node/13932> [<https://perma.cc/6ARE-ZM6N>] (last visited Apr. 21, 2018). Some ginseng farmers grow "wild-simulated" ginseng, which can still sell at \$300–\$700 per pound. Brian Barth, *5 of the Most Valuable Crops You Can Grow in the US—And How to Grow Them*, MODERN FARMER (July 17, 2017), <https://modernfarmer.com/2017/07/5-valuable-crops-can-grow-us-grow/> [<https://perma.cc/7UD4-LFXW>].

107. Telephone Interview with David Thorneloe, U.S. Attorney (Feb. 2, 2017) [hereinafter Thorneloe 1]. In the reality show *Appalachian Outlaws*, ginseng buyer Tony Coffman brags that his business is worth "not just tens of millions of dollars, but hundreds of millions of dollars." *Appalachian Outlaws: Dirty Money*, at 09:44 (History television broadcast Jan. 9, 2014), <http://www.history.com/shows/appalachian-outlaws/season-1/episode-1> [<https://perma.cc/DJX7-JSTJ>].

108. Telephone Interview with David Thorneloe, U.S. Attorney (Feb. 21, 2017) [hereinafter Thorneloe 2].

109. United States v. Hurley, No. 1:15-cr-00082-MR, 2015 BL 377137, at *7 (W.D.N.C. Nov. 16, 2015).

110. Taylor, *Great Smoky Mountains*, *supra* note 103**Error! Bookmark not defined.**

Thorneloe, who prosecuted the latest case and several of Hurley's earlier convictions, said that while ginseng poaching cases in general are common, and Hurley "was turning into an annual event," such repeat offenses are relatively rare.¹¹¹ Thorneloe stated that although he has considered using the Lacey Act to take advantage of its higher potential penalty as a felony, the National Park Service's regulation has been sufficient in these cases.¹¹²

2. *In the Case of the Venus Flytrap*

North Carolina has taken a decisive stance on tougher penalties in a recent attempt to curb poaching of the Venus flytrap, its official state carnivorous plant.¹¹³ In 2014, the State created a new felony penalty for "[a]ny person, firm, or corporation who digs up, pulls up, takes, or carries away. . . any Venus flytrap [plant or seed]. . . growing upon the lands of another person, or from the public domain, with the intent to steal."¹¹⁴ Instead of the previous misdemeanor maximum \$50 fine,¹¹⁵ the new felony is punishable by at least four and up to thirty months in prison.¹¹⁶ The only exception is for someone who has a permit, which must be in the person's possession at the time they dig, pull, take, or carry away the plant.¹¹⁷

The first charges under the new felony law were levied against four men who poached 970 flytraps from the Holly Shelter Game Land in January 2015.¹¹⁸ Three of the men pled guilty and received sentences of twelve and twenty-four

111. Thorneloe 1, *supra* note 107 **Error! Bookmark not defined.**

112. Thorneloe 2, *supra* note 108 **Error! Bookmark not defined.**

113. N.C. GEN. STAT. § 145-22 (2016).

114. *Id.* § 14-129.3(a).

115. During the same session, the General Assembly expanded this penalty up to \$175 for the taking of many other state-protected plants. S.B. 734, 2013-14 Sess. (N.C. 2013), 2014-120 N.C. Sess. Laws 36 (codified at N.C. GEN. STAT. § 14-129 (2017)).

116. N.C. SENTENCING & POL'Y ADVISORY COMM'N, STRUCTURED SENTENCING TRAINING AND REFERENCE MANUAL 4-5 (2009).

117. N.C. GEN. STAT. § 14-129.3(b) (2017).

118. Christopher Mele, *Venus Flytraps Need Protection From Poachers in North Carolina*, N.Y. TIMES (Nov. 28, 2016), https://www.nytimes.com/2016/11/28/us/venus-flytraps-poaching-north-carolina.html?_r=0; see also, *That Won't Fly: Venus Flytrap Thief Snags Prison Sentence in North Carolina*, GUARDIAN (July 27, 2016) <https://www.theguardian.com/us-news/2016/jul/27/venus-flytrap-thief-prison-sentence-north-carolina> [<https://perma.cc/V8C3-J4HH>].

months of probation; the fourth received six to seventeen months in prison.¹¹⁹ Not long after, in November of 2015, two other men—both with prior plant poaching criminal records—were also charged under the new felony for poaching 1025 Venus flytraps (along with some pitcher plants) from private property on Orton Plantation.¹²⁰ By sentencing some of the most egregious ginseng and flytrap poachers to jail time, North Carolina has shown it takes these crimes seriously, and is attempting to deter other potential poachers.

B. Using the Lacey Act to Enforce State Laws: United States v. J & L Tonewoods

On the other side of the country from North Carolina's bogs, a similar poaching epidemic has chopped its way through the Pacific Northwest's temperate rainforests. Scattered among the tall bigleaf maples are a few "defective" trees with ripples like petrified waves through their woodgrain—ripples prized by guitar-makers and poetically termed "figured maple" or "music wood."¹²¹ These trees—among others prized by poachers, like cedar and Douglas fir—can easily exceed 100 feet in height, and have long fallen prey to resourceful midnight chainsaw operators.¹²² Such "tree theft" has been documented since the early 20th century,¹²³ with monetary losses estimated from \$100 million¹²⁴ to \$1 billion across the U.S. annually.¹²⁵ The ties between tree poaching, poverty, and

119. Mele, *supra* note 118; Jim Ware, *Brunswick Man Found Guilty in Venus' Flytrap Theft*, STARNEWS (July 26, 2016), <http://www.starnewsonline.com/news/20160726/brunswick-man-found-guilty-in-venus-flytrap-theft> [https://perma.cc/9NVH-LWDC].

120. Josh Shaffer, *Big Penalty Awaits North Carolina's Flytrap Pilferers*, CHARLOTTE OBSERVER (Nov. 30, 2015), <http://www.charlotteobserver.com/news/local/article47144230.html> [https://perma.cc/Y82T-SQ64].

121. Ellis E. Conklin, *The Olympic Peninsula's Meth-Head Maple Thieves*, SEATTLE WEEKLY (Apr. 16, 2013), <http://archive.seattleweekly.com/home/946487-129/wood-maple-says-timber-sisson-county> [https://perma.cc/E6C3-J253].

122. *Id.* (quoting an interview by Mason County Sheriff's Deputy Jason Sisson: "[T]hey're out there with goggles and headlamps and chainsaws, felling 200-foot trees in the middle of the night!").

123. Pendleton, *Tree Theft*, *supra* note 72, at 39.

124. *Id.*

125. Conklin, *supra* note 121.

drug use—particularly methamphetamine (meth)—are just as well-documented.¹²⁶ A local of the logging community of Shelton, Washington told reporters that people who steal maple:

[W]ork like dogs. . .and then they smoke it up and do it all again. . .I asked one of them why he can't find any easier way to steal. And he just says to me, he says, 'It's real easy to do this [expletive] and not get caught.'¹²⁷

Despite the extensive ecological and monetary damage these tree poachers cause, they are rarely caught or prosecuted.¹²⁸ As with ginseng, community silence and acceptance may again play a strong role in this trend, including acceptance of mill owners who knowingly buy poached wood.¹²⁹ These mill practices were largely unquestioned and unchallenged, until an innovative combination of a Washington State permitting law and the Lacey Act was used to target not only the individual poverty poachers but also the knowing buyer.

In July of 2015, a federal grand jury indicted Washington timber mill J & L Tonewoods for knowingly buying figured maple poached from the Gifford Pinchot National Forest and reselling it to guitar makers, earning over \$800,000 between 2011 and 2013 alone.¹³⁰ The prosecutor in this case, Seth Wilkinson, had prosecuted individual “cutters” before, but felt those convictions did little to relieve the poaching problem.¹³¹ Meth use, he said, is “mutually complimentary with this type of theft” because cutters use meth to “keep going” and work long hours in the night.¹³² Similar to the theft of copper wire in

126. See, e.g., Pendleton, *Tree Theft*, *supra* note 72, at 47–48 (categorizing the “desperate poacher” as someone “having difficulty making enough income to meet the basic requirements of life” and the “criminal poacher” as commonly “associated with drug use and drug dealing”).

127. Conklin, *supra* note 121 **Error! Bookmark not defined.**

128. *Id.*

129. Pendleton, *Tree Theft*, *supra* note 72, at 39, 44.

130. J & L Tonewoods Indictment, *supra* note 10 at 4. Three individual poachers were also indicted in this case for theft and damage to government property. *Id.* at 5–6.

131. Telephone Interview of Seth Wilkinson, Assistant U.S. Attorney (Dec. 8, 2016) (on file with author) [hereinafter Wilkinson 1].

132. *Id.*

urban areas, he says that figured maple is a “classic example” of an item in rural areas that is “easy to take” and has “tremendous value.”¹³³

Coordinated law enforcement found a larger target: J & L Tonewoods, a mill that may have been relying partly on the community’s silence to perpetuate the problem. According to Wilkinson, such mills have well-known reputations,¹³⁴ but “the biggest challenge” is proving that the mill is buying wood it *knows* is stolen.¹³⁵ This is where a Washington state permitting law helped fill in that gap.

The Washington Specialized Forest Products Act (SFPA) requires a state permit¹³⁶ for harvesting any “specialized forest product” listed in the SFPA, which includes bigleaf maple.¹³⁷ Buyers of specialized forest products must also ensure that suppliers have a valid permit,¹³⁸ and record and retain that permit number.¹³⁹ In *United States v. J & L Tonewoods*, investigators showed—through the mill owner’s failure to check for record permit numbers—that he knew that he was purchasing and reselling figured maple taken in violation of state law.¹⁴⁰ These state laws not only provided the required *mens rea*,¹⁴¹ but also provided the hook to apply the Lacey Act and its harsher penalties. Since the *J & L Tonewoods* indictment, Washington federal prosecutors have not brought any subsequent cases against lumber mills.¹⁴² Though the *J & L Tonewoods* case was too recent to evaluate its deterrent effect, Wilkinson hopes that the lack of subsequent cases is

133. *Id.*

134. *Id.* (“You pretty much always know where the wood is going.”).

135. *Id.* “Knowingly” is the required *mens rea* for all related charges against J & L Tonewoods, including receipt of stolen federal property and violations of the Lacey Act. *J & L Tonewoods Indictment*, *supra* note 10, at 4, 7–8.

136. WASH. REV. CODE. § 76.48.131 (2017).

137. *Id.* § 76.48.021(21), (23).

138. *Id.* § 76.48.101.

139. *Id.* § 76.48.111.

140. *J & L Tonewoods Indictment*, *supra* note 10, at 7–8.

141. The other charge indicted against Tonewoods, receipt of stolen federal property under 18 U.S.C. §§ 2, 641, requires the government to prove that the defendant knew the property was stolen, rather than that the defendant just bought the trees without checking for a permit. Interview with Seth Wilkinson, Assistant U.S. Attorney (Feb. 17, 2017) [hereinafter Wilkinson 2].

142. *Id.*

because other mills have taken notice, and are being more careful in their lumber purchases.¹⁴³

V. A MULTI-LAYERED APPROACH TO EQUITABLY CURBING VENUS FLYTRAP POACHING

Plants like the Venus flytrap that are targets of poachers have economic, cultural, and ecological value deserving protection. Yet, federal law has not provided these plants with the same protections as animals, and poaching has taken a heavy toll on both the targeted species and the local communities that are being stripped of their natural wonders. Those investigators and prosecutors who do take plant poaching seriously have few options but to rely on traditional animal poaching enforcement methods, which are not designed to protect plants. Furthermore, these traditional methods perpetuate inequities against poverty poachers.

Instead, a workable enforcement scheme must broaden its scope to encompass the needs of plants, reduce tensions between the government and communities that idealize folk crimes, and aim the power of state and federal laws towards dealers who most influence illegal trafficking. North Carolina has already shown it values its unique carnivorous plant with its felony poaching law, but that may not be enough in itself. Protecting the Venus flytrap should involve a multi-layered framework of stronger deterrence, a way to show a buyer's criminal intent through a marking or permit system, and using the Lacey Act to target charges at buyers and resellers.

A. *Layer One: Benefits and Drawbacks of Tougher Penalties Alone*

While the 2014 North Carolina felony penalty is too new to determine its possible deterrent effect, the focus of the law is still on individual poachers, who may or may not be poaching out of economic necessity. On the one hand, removing serial poachers with jail time may give targeted plants a chance to recover or be relocated, as in the case of sanger Billy Joe Hurley. Other smaller-scale poachers or potential poachers

143. *Id.*

may also be discouraged from entering the trade altogether. Because a single poacher can devastate an entire swath of flytraps (or ginseng) within a few hours, removing even a few of the more injurious individuals may have a large positive impact on the ecosystem.¹⁴⁴

On the other hand, the ever-increasing rarity and prices of ginseng and Venus flytraps may offset any deterrent effect. Throwing poverty poachers in jail will likely only increase their cycle of poverty, and they may end up returning to poaching—as with any black-market trade—out of necessity. In other poaching contexts, stiffer penalties may start to backfire: in the face of harsh punishment, poachers may turn to violence when confronted.¹⁴⁵ Especially when poverty is mixed with other motives, such as cultural tradition or defiance against the government, increasingly harsh punishment may only further delegitimize the law in the eyes of poachers and their communities.¹⁴⁶ Additionally, removing individual poachers reduces neither the market demand for Venus flytraps, nor dealers' willingness to accept suspicious plants without question.

B. Layer Two: Tracking the Dealer's Intent Through Permits and Markings

Despite its flaws, the felony Venus flytrap law can still be a useful tool. In combination with other state laws or regulations, these penalties could theoretically be levied against illegal buyers and resellers, but there are difficulties to overcome. Mainly, dealers' "intent to steal"¹⁴⁷ would be difficult to prove, as they could always claim ignorance of the flytrap's origin. One potential solution might be to require resellers to

144. See, e.g., Taylor, *Great Smoky Mountains*, *supra* note 103 **Error! Bookmark not defined.**; Mele, *supra* note 118 **Error! Bookmark not defined.** (quoting Massey as saying, "he could collect 'a couple of hundred' of the [flytraps] in three or four hours crawling on the forest floor").

145. von Essen et al., *supra* note 60, at 635 (noting that "harsh penal codes have created a cycle of progressively more violent retaliations between illegal hunters and the rest of society").

146. *Id.* at 643–44 ("[A]n overly punitive sanction in a management context with legitimacy deficit and weak social bonds between perpetrators and the sanctioning agent would . . . result in further loss of respect for authorities.").

147. N.C. GEN. STAT. § 14-129.3(a) (2017).

maintain records of their sources' valid permits, similar perhaps to Washington's specialized forest product permit.¹⁴⁸ North Carolina already has permit requirements for Venus flytrap diggers.¹⁴⁹ In addition, buyers must get a copy of the digger's permit when buying out-of-season, but need not obtain their own dealer's permit to buy or resell flytraps.¹⁵⁰ Ginseng dealers, by contrast, must have their own permit to buy or resell ginseng, which they must renew annually.¹⁵¹ The North Carolina state legislature need only close some slight gaps to shift the heavier permitting burden onto flytrap dealers, as well as the responsibility to affirmatively show that they source flytraps from legal diggers.

Another potential aid to proving a dealer's criminal intent—whether in conjunction with a permitting system or not—may be a widespread marking system. Biologist Jeff Corbin developed a fluorescent dye used to mark ginseng roots in the Great Smoky Mountains, which has been successfully used to show the origin of poached ginseng in Billy Joe Hurley's case and others.¹⁵² In *J & L Tonewoods*, prosecutors had prepared (but did not use) DNA evidence linking the stolen wood to stumps on federal land.¹⁵³ Orange dye has also been used on Venus flytraps in the National Conservancy's Green Swamp Preserve since 2006.¹⁵⁴ If a marking system were used to trace where flytraps were taken, however, the system would have to be consistently applied in all public lands where flytraps are protected. Also, the State would need to incorporate such a marking system not just against the poacher, but also against a dealer, such as by requiring dealers to check for markings and record the results in a verifiable way.

148. WASH. REV. CODE. § 76.48.131 (2017).

149. *Id.* § 106-202.19(a)(6a).

150. *Id.* § 106-202.19(a)(6c). Violations of these permitting requirements are Class 2 misdemeanors. *Id.* § 106-202.19(a)(1).

151. *Id.* §§ 106-202.19(a)(6); 106-202.21. An April 2017 attempt to strengthen ginseng permitting died in committee. H.B. 733, 2017-2018 Sess. (N.C. 2017).

152. Taylor, *Great Smoky Mountains*, *supra* note 103**Error! Bookmark not defined.**

153. Wilkinson 1, *supra* note 131.

154. Shaffer, *supra* note 120**Error! Bookmark not defined.**

C. Layer Three: Overlaying the Lacey Act on State Laws

The Lacey Act broadly prohibits three general categories of activities related to plants: 1) importing foreign plants without the proper declaration;¹⁵⁵ 2) falsely labeling or identifying plants intended for foreign or interstate commerce;¹⁵⁶ and 3) any other non-marking offenses.¹⁵⁷ State laws are only implicated in the latter two prohibitions. Relevant non-marking offenses broadly include the selling, receiving, acquiring, or purchasing of any plant taken or possessed in violation of any state law or regulation “that protects plants.”¹⁵⁸

The Lacey Act may provide more flexibility in proving intent, depending on the circumstances. Penalties fall under three categories: civil,¹⁵⁹ criminal,¹⁶⁰ and forfeiture of imported plants.¹⁶¹ Civil penalties for non-marking plant violations require only a showing that the person did not exercise due care to ensure that the plants were not taken, possessed, transported, or sold unlawfully.¹⁶² If the plants are worth at least \$350, the civil penalty maxes out at \$10,000 for each violation.¹⁶³ Felony criminal penalties may apply to someone

155. 16 U.S.C. § 3372(f) (2012).

156. *Id.* § 3372(d).

157. *Id.* § 3372(a). These non-marking violations are themselves split into many types, most of which are not relevant to this discussion. Plants taken in violation of U.S. federal or tribal law are covered in § 3372(a)(1), while § 3372(a)(2) covers violations of state or foreign law. Plants that are harvested legally but sold or transported without payment of a required state or foreign tax or fee, are also protected under § 3372(a)(2)(B)(ii). See ALEXANDER, *supra* note 45, at 5–7 (summarizing and giving examples of how the various prohibitions in the Lacey Act may be applied to different plant law violations).

158. 16 U.S.C. § 3372(a)(2)(B)(i) (2012). More specifically, the state law involved must regulate: “(I) the theft of plants; (II) the taking of plants from a park, forest reserve, or other officially protected area; (III) the taking of plants from an officially designated area; or (IV) the taking of plants without, or contrary to, required authorization.” *Id.*

159. *Id.* § 3373(a).

160. *Id.* § 3373(d).

161. *Id.* § 3374(a). Not relevant here is an additional potential forfeiture of an import permit. *Id.* § 3373(e); see also Krost, *supra* note 40, at 61–63 (summarizing the Lacey Act’s penalty mechanisms).

162. 16 U.S.C. § 3373(a)(1) (2012). Additionally, showing the person knowingly falsely labeled a plant for interstate commerce can garner the same civil penalty. *Id.*

163. *Id.*

who violates a non-marking prohibition by “knowingly engaging in conduct that involves the sale or purchase. . .or the intent to sell or purchase” plants “*knowing* that the. . .plants were taken, possessed, transported, or sold in violation of. . .any underlying law.”¹⁶⁴ So long as the value of plants is at least \$350, a felony criminal penalty can be as high as \$20,000 and/or a maximum five years in prison.¹⁶⁵ However, a misdemeanor fine of \$10,000 and/or one year in prison may also apply to a dealer who only “in the exercise of due care *should know*” that plants were taken in violation of an underlying law.¹⁶⁶ In other words, a felony charge requires that the buyer know the plants were poached, but a misdemeanor charge more closely approaches negligently buying poached plants.

Using the Lacey Act to prove the dealer’s criminal intent (as well as to attain a higher penalty) could be another way to use North Carolina’s felony Venus flytrap law against dealers. If a flytrap digger takes flytraps without the required digging permit—and had the intent to steal the flytrap—then the digger has violated the state felony law.¹⁶⁷ If a dealer then buys flytraps from that digger out-of-season without getting a copy of the digger’s (non-existent) permit, then that dealer has committed a state misdemeanor.¹⁶⁸ However, even without the state misdemeanor, that dealer could also be charged with a Lacey Act violation. By not exercising due care in checking for the digger’s permit (or buying flytraps in other suspicious circumstances), the dealer should know the flytraps are stolen and could be charged with a misdemeanor Lacey Act violation. If a plant marking system or stricter permitting system were implemented to prove that a dealer *actually* knows they are buying stolen flytraps, then the dealer could even be charged with a felony Lacey Act violation. In this way, innocent store buyers at least one link removed from this chain would not be culpable; only those dealers who purchase flytraps directly from poachers could be liable.

164. *Id.* § 3373(d)(1) (emphasis added).

165. *Id.*

166. *Id.* § 3373(d)(2) (emphasis added).

167. N.C. GEN. STAT. § 14-129.3 (2017).

168. *Id.* § 106-202.19(a)(6c), (a1).

But: A word of caution. Because the Lacey Act can sweep so broadly, prosecutors may want to reserve its use for more egregious cases to avoid political and community backlash. After the Gibson Guitar crackdown, instrument makers, legal scholars, and politicians sputtered stinging venom against the Lacey Act's 2008 amendments expanding foreign law to plants. Nearly 9,000 musical instrument merchants protested the burden on importers to know and comply with all foreign plant laws;¹⁶⁹ scholars criticized the Act's complexities and enforcement issues;¹⁷⁰ and a handful of members in Congress attempted to amend it again.¹⁷¹ The power of such a combined state and federal system could go a long way towards protecting the Venus flytrap, but should always be implemented with a mind towards fairness.

VI. CONCLUSION

Poverty poaching has only received sporadic scholastic attention, and more evidence must be collected in the field of plant poaching. Still, existing patterns of poaching motivations provide enough background for lawmakers to integrate the effects of poverty into more effective plant poaching laws. Stricter punishments alone, like North Carolina's 2014 felony penalty, will not decrease market demand for highly collectible plants like Venus flytraps, and may only shift the heaviest burdens onto individuals that already poach out of desperation. However, aiming those harsher penalties at upstream buyers and resellers who make the most profits—through a combination of permits, plant markings, and the Lacey Act—may better protect the Venus flytrap and other vulnerable species. Without a workable, equitable framework, this tiny, jawed plant that has so long captured the world's fascination—the Goddess Dione's mousetrap—may become as mythical as its namesake.

169. Wesley Ryan Shelley, Comment, *Setting the Tone: The Lacey Act's Attempt to Combat the International Trade of Illegally Obtained Plant and Wildlife and its Effect on Musical Instrument Manufacturing*, 42 ENVTL. L. 549, 565 (2012).

170. Krost, *supra* note 40, at 70–76.

171. Shelley, *supra* note 169, at 573–74.