

# “A National Calamity”: Locust Eradication Efforts in Argentina, ca. 1890-1920

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## ABSTRACT

At the end of the nineteenth century, the national government of Argentina began a program to combat the locust invasions that afflicted the country and threatened its agricultural wealth. This program raised important questions about the authority of the national state and that of the provinces. The congressional opposition characterized the project as an unconstitutional intrusion on the authority of the provinces. Nevertheless, the legislation of 1897 created a national network of commissions dedicated to the extinction of locusts. This legislation and the program that it began revealed an attempt by the national government not just to safeguard the nation's economic prosperity, but to inculcate in the farmers of the provinces and territories a feeling of national identity. The search for a “permanent zone” or “wintering zone” in the north of the country, where locusts supposedly lived during the winter, also represented an opportunity to integrate the recently conquered Chaco Austral into the nation.

A fines del siglo XIX, el gobierno nacional de Argentina inició un programa de combatir las invasiones de langosta que habían afligido el país y amenazado su riqueza agrícola. Este programa alzó cuestiones importantes sobre la autoridad del gobierno nacional y la de las provincias. La oposición en el congreso caracterizó el proyecto como una intrusión inconstitucional al poder y la autoridad de las provincias. Sin embargo, con la legislación de 1897 se creó una red de comisiones dedicados a la extinción de la langosta. Esta legislación y el programa que inició revelaron un intento por parte del gobierno nacional no sólo de proteger la prosperidad económica de la nación, sino de inculcar en los agricultores de las provincias y territorios un sentimiento de identidad nacional. La búsqueda por una “zona permanente” o “zona invernada” en el norte del país, donde se suponía que las langostas vivieran durante el invierno, también representó una oportunidad de integrar el recién conquistado Chaco Austral a la nación.

**Keywords:** locust; Chaco; agriculture; agricultural defense.

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In 1892 President Carlos Pellegrini sent a message to the Chamber of Deputies with a stark warning. Locusts were invading Santa Fe and Entre Ríos, major agricultural provinces, as he spoke. But the hordes were not just destroying the livelihoods of individuals. He described the locusts as “a calamity that affects everyone” because they threatened the agricultural production of the nation.<sup>2</sup> Locusts were not new to the region, but with the expansion of cultivation, especially wheat, they became a major threat to national prosperity for the first time.<sup>3</sup>

Argentina’s economy had traditionally relied upon ranching. Until the late nineteenth century, cattle were allowed to roam the pampas at will, reproducing naturally. Because of the availability of land, the cattle industry required little input of capital or labor, and so the region remained sparsely populated.<sup>4</sup> In the last decades of the nineteenth century, Argentina became a major exporter of wheat, following the growth of railroad lines into the interior. By the early twentieth century it was one of the biggest exporters of wheat in the world, producing four million tons of wheat, half of which was sent abroad.<sup>5</sup> Wheat was an ideal crop because it was easy to grow, light (and thus easy and cheap to transport), and easy to preserve and store.<sup>6</sup> It was largely to protect this newfound economic bounty that nation-wide locust-eradication programs emerged.

Pellegrini’s message, and the accompanying legislation he proposed, inaugurated a heated debate in the Argentine congress, a debate that continued with a renewed push for anti-locust legislation in 1897. The bill called for a coordinated, nation-wide program to fight locusts: every adult over 17 in a region invaded by locusts could be called upon, along with their tools and draft animals, to participate in the effort. The bill proposed a hierarchy of anti-locust commissions: a central one to coordinate the national effort, along with provincial commissions and more localized sub-commissions. The bill also authorized the president to call upon the national guard

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<sup>2</sup> Cámara de Diputados, *Diario de sesiones de la Cámara de Diputados, Año 1892: Sesiones Ordinarias* (Buenos Aires: Empresa General Belgrano, 1892), p. 512.

<sup>3</sup> James R. Scobie, *Revolution on the Pampas: A Social History of Argentine Wheat, 1860-1910* (Austin: University of Texas, Austin, 1964), p. 25.

<sup>4</sup> John Lynch, “The River Plate Republics from Independence to the Paraguayan War,” in *The Cambridge History of Latin America Volume 3*, ed. Leslie Bethell (Cambridge: Cambridge University Press, 1985), p. 626.

<sup>5</sup> Scobie, *Revolution on the Pampas*, p. ix, 9.

<sup>6</sup> *Ibid.*, p. 34-35.

to assist in fighting locusts, at his discretion.<sup>7</sup> These three provisions would be the key issues of dispute in 1892 and again in 1897. At issue were the constitutionality of obligatory labor, the authority of the national government to act independently of provincial governments within those provinces, and the use of the armed forces within the nation in a non-military capacity.

The centrality of these issues reflected the enduring salience of debates about the centralization of political authority in Argentina. For much of the nineteenth century after independence, those disputes had been settled on the battlefield. Only in 1862 had Argentina been united politically, and armed rebellion by provincial caudillos continued in the following decades.<sup>8</sup> As Hilda Sabato has noted, the defeat of the province of Buenos Aires, and the subsequent federalization of the capital city, in 1880, marked “the moment of the definitive consolidation of the national state.”<sup>9</sup> By the 1890s debates about the division of authority between the provinces and the national government had largely moved to the halls of congress.<sup>10</sup> Thus at the heart of these debates about fighting a natural phenomenon were fundamentally political questions. The eventual passing of the national legislation in 1897, leading to the creation of a nationwide locust-eradication program, demonstrated an increasing acceptance of the idea that the national government was the only entity capable of combatting locusts, and that it had the right to do so independently of the provinces.

This article uses newspapers, congressional records, and official reports to investigate how on the one hand, anti-locust campaigns became part of a larger effort to bind the disparate provinces and territories together and make Argentine citizens of their inhabitants, and on the other hand, the expansion of Argentina northward shaped national perceptions of locusts as inhabitants of an unsettled frontier zone or even as foreign invaders. To do so, the article looks first at the congressional debates surrounding the legislation of 1892 and 1897, in which critics of the bills cast them as

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<sup>7</sup> Diputados, *Sesiones Ordinarias, 1892*, p. 513.

<sup>8</sup> David Rock, *State Building and Political Movements in Argentina, 1860-1916* (Stanford: Stanford University Press, 2002), p. 21, 59-68.

<sup>9</sup> Hilda Sabato, *Buenos Aires en armas: La revolución de 1880* (Buenos Aires: Siglo Veintiuno, 2008), p. 291.

<sup>10</sup> This is not to say that political violence had ended; in 1893 Radicals under Hipólito Irigoyen launched uprisings in Buenos Aires province and Rosario, Santa Fe, but this was in response to their exclusion from the political process, not an armed attack on the political unity of Argentina. See Rock, p. 156, 160.

infringements on provincial autonomy, and proponents saw them as opportunities for the Argentine state to extend its reach into the interior provinces of the west and north.

The article then looks at the strategies and tools used by the Commission for the Extinction of Locusts, which emerged from the 1897 legislation, as well as local opposition to the work of the commissions. Reports authored by anti-locust commissions frequently cast the campaigns as great, collective efforts that both required the efforts of the citizenry and contributed to making the citizenry. As we shall see, they often coupled this with a rather dismissive view of the present state of the people. These disputes and conflicts at the local level show how the centralizing project of the locust commissions was shaped and contested by its would-be beneficiaries. They also reveal that for many proponents of the anti-locust effort, the program went hand-in-hand with elitist efforts to craft national citizens from the inhabitants of the far-flung provinces.

Whether in the halls of congress or in provincial towns, these conflicts cast the locusts not as a natural part of the Argentine landscape, but as a foreign threat of unknown provenance. Thus, the final section looks at the search for the “permanent zone,” a place which was thought to be the breeding ground for locusts, possibly in the *chaqueño* region of Salta province and in southeastern Bolivia, and how the search for this zone was part of the larger national effort to integrate this frontier area, which had only been conquered in the 1880s, into the nation and “civilize” its inhabitants.

Historians of Argentina have shown how governing elites constructed the country’s northern (and southern) extremities as peripheral, but not for that reason unimportant; quite to the contrary. Eric Carter has shown how malaria eradication efforts from the late nineteenth century onwards were deeply imbricated in a conception of Argentina’s northwest as a backward, underdeveloped region.<sup>11</sup> Frederico Freitas has shown how the establishment of the nation’s second national park at Iguazú in the northern province of Misiones was part of a similar modernizing impulse—and an attempt to forestall perceived Brazilian penetration of the region.<sup>12</sup> Gastón Gordillo and

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<sup>11</sup> Eric D. Carter, *Enemy in the Blood: Malaria, Environment, and Development in Argentina*, (Tuscaloosa: The University of Alabama Press, 2012), p. 18-19.

<sup>12</sup> Frederico Freitas, *Nationalizing Nature: Iguazu Falls and National Parks at the Brazil-Argentina Border* (Cambridge: Cambridge University Press, 2021), p. 12, 25.

Juan Martín Leguizamón have shown how the Pilcomayo River and the surrounding region became at once a frontier zone separating Argentina and Paraguay, and a source of largely Indigenous labor for extractive industries in both countries.<sup>13</sup> Argentina’s anti-locust campaigns, and especially the search for a “permanent zone,” in the Chaco were part and parcel of these larger histories.

Environmental historians and scholars of nationalism and “the state” have shown how elite projects of governance in a wide variety of contexts have sought to dominate peoples and natural environments—and how the domination of one was inextricably related to the domination of the other.<sup>14</sup> Argentina’s anti-locust apparatus can be understood as a manifestation of what Matthew Kelly et al. have called “the nature state”—as an attempt to control, rather than despoil, nature in a purportedly rational way, especially through the creation of national parks and reserves.<sup>15</sup> Argentina’s anti-locust campaigns offer a different window into the nature state: the fight to protect a specific product of nature, agricultural wealth, and the livelihoods of the people who produced it. Thus, the article seeks to bring agrarian and agricultural history into discussions of the nature state.

In recent years scholars of environmental issues in Latin America have begun to study the history of locusts in agrarian societies. Scholars have noted that fighting locusts was at once a technical and scientific challenge, as well as a political and social problem. They have also emphasized the importance of collective action and technical expertise, both of which would be important in Argentina.<sup>16</sup> The fight against the South American locust (*Schistocerca cancellata*) in the late nineteenth and twentieth centuries became an international endeavor since its reach extended across virtually the entire southern half of the continent.<sup>17</sup> Valéria Dorneles Fernandes has written about anti-

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<sup>13</sup> Gastón Gordillo and Juan Martín Leguizamón, *El río y la frontera: movilizaciones aborígenes, obras públicas y Mercosur en el Pilcomayo* (Buenos Aires: Editorial Biblos, 2002), p. 33-34.

<sup>14</sup> James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998), p. 2-6, 37-51, 183-261; Thomas D. Rogers, *The Deepest Wounds: A Labor and Environmental History of Sugar in Northeast Brazil* (Chapel Hill: The University of North Carolina Press, 2010), p. 1-9, 45-69.

<sup>15</sup> Matthew Kelly et al., introduction to *The Nature State: Rethinking the History of Conservation*, eds. Wilko Graf von Hardenberg Matthew Kelly, Claudia Leal and Emily Wakild (London: Routledge, 2017), p. 1-2.

<sup>16</sup> Martha Few, “Killing Locusts in Colonial Guatemala,” in *Centering Animals in Latin American History*, eds. Martha Few and Zeb Tortorici (Durham: Duke University Press, 2013), p. 79-84; Inés Ortiz Yam and María Cecilia Zuleta, “Asuntos de vecinos: Langosta, defensa agrícola y la construcción de la sanidad vegetal en México y Centro América, siglo XX,” *Historia Mexicana* 70 No. 1 (July-September 2020), p. 322-325, 334-350.

<sup>17</sup> Eduardo V. Trumper et al., “A Review of the Biology, Ecology, and Management of the South American Locust, *Schistocerca cancellata* (Serville, 1838), and Future Prospects,” *Agronomy* 12 No. 1 (2022): 6.

[https://www.researchgate.net/publication/319987703\\_The\\_resurgence\\_of\\_the\\_South\\_American\\_locust\\_Schistocerca\\_cancellata](https://www.researchgate.net/publication/319987703_The_resurgence_of_the_South_American_locust_Schistocerca_cancellata).

locust campaigns in Argentina, Brazil, and Uruguay. She has emphasized the importance of international networks of expertise and cooperation. She highlights three conferences held in Uruguay in 1913, 1934, and 1946 as key moments in this regional effort. But it was Argentina, she argues, that was the true regional leader in anti-locust campaigns.<sup>18</sup> In their comparative discussion of anti-locust efforts in Argentina and Australia, Edward Deveson and Alejandro Martínez emphasize the importance of the national government and an international network of professional scientific expertise in both cases.<sup>19</sup> Deveson and Martínez use the concept of “scientific, technological, and ecological ‘wars’” to describe the multi-pronged approach of the two national governments: the use of machinery, natural predators, and chemical spraying against locusts.<sup>20</sup> This article seeks to expand on this work, in part, by examining the “soldiers” who fought in these wars.

In short, anti-locust efforts often provoked similar responses—communal labor, government intervention, appeal to scientific expertise—in widely differing contexts. Politics usually sought to employ collective action, though the scale on which such labor was recruited (or conscripted) varied according to the context. People fighting locusts often used the same techniques for centuries: fire, noise, and brute crushing force were the staples of such campaigns. Argentine officials in the late nineteenth century saw the insect as a challenge to the nation’s rising prosperity, and the struggle for their eradication as an opportunity to exert tighter control over the provinces. From the debates about provincial versus central authority, the quest to protect Argentina’s agricultural wealth through scientific research, technology, and labor mobilization, and the search for a permanent zone, the fight against locusts was a wide-ranging and long-term project that cast locusts as enemies of the nation and barriers to progress, and their eradication as a key component of state-making.

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<sup>18</sup> Valéria Fernandes, “Combate à praga de gafanhotos na América do Sul: diferentes técnicas apresentadas pelo *Almanaque do Ministério de Agricultura de la Nación (Argentina, 1925-1952)*,” *Estudios Rurales* 8 (October 2018), p. 234; Valéria Dorneles Fernandes, “A praga de gafanhotos no Sul da América: Argentina, Brasil e Uruguai (1890-1950),” *Fronteiras: Journal of Social, Technological and Environmental Science* 7 No. 3 (Sept.-Dec. 2018), p. 155-158. <http://dx.doi.org/10.21664/2238-8869.2018v7i3.p145-160>.

<sup>19</sup> Edward Deveson and Alejandro Martínez, “Locusts in Southern Settler Societies: Argentine and Australian Experience and Responses, 1880-1940,” in *Environmental History in the Making*, eds. Estelita Vaz Cristina, Joanaz de Melo, and Lígia M. Costa Pinto (Cham, Switzerland: Springer International Publishing, 2017), p. 259-260.

<sup>20</sup> *Ibid.*, p. 260, 277-278, 282.

## THE CRISES OF 1891-1892

In 1891, Argentina’s president, Carlos Pellegrini, urged the congress to confront the plague of locusts that was devastating the nation’s agricultural provinces. His proposal, which passed in August of that year, obligated “every farmer [*agricultor*] or rancher of the locality invaded by the locust” to participate in fighting the invasion.<sup>21</sup> The crisis was grave: Pellegrini told the senate in his address to open the session that, the latest maize crop had been “almost destroyed” by droughts and locusts.<sup>22</sup> Senator Antonio del Pino of Catamarca championed the law, saying that farmers throughout the country felt helpless before the onslaught, which threatened the entire national economy.<sup>23</sup> Pellegrini’s government established a national commission for locust eradication under Nicolás Oroño, and Governor Juan Cafferata of Santa Fe established a provincial commission.<sup>24</sup> Pellegrini himself personally toured Santa Fe province during the locust attacks of October 1892, lauding the farmers and officials who joined in the fight. Santa Fe had been one of the first provinces to write an anti-locust law in 1880, which partly inspired the 1891 legislation. The attacks of 1892 caused panic in the province, especially as santafesinos realized that locusts were simultaneously attacking other provinces; the swarms grew so large that they delayed trains.<sup>25</sup>

But the 1891 law turned out to be insufficient; locusts struck across the country, in the province of Buenos Aires, in Jujuy, in Entre Ríos, in Mendoza and in Santa Fe.<sup>26</sup> And so Pellegrini returned to congress. In his July 1892 address justifying the new bill, Pellegrini noted that the previous year, prompt action had saved the harvest in Santa Fe and parts of Buenos Aires, but other provinces had not been so fortunate; the profitable vineyards of Mendoza, for example, had been devastated by the locusts. He noted that in this year, 1892, the locusts had already begun their ravages, and, unusually, even cold weather did not stop them; he feared they were adapting to the climate of the country, which would make them a constant threat in the future if not stopped. The fear that locusts would make a permanent home in Argentina’s agricultural provinces

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<sup>21</sup> Cámara de Senadores, *Diario de sesiones de la Cámara de Senadores, Año 1891* (Buenos Aires: Compañía Sud-Americana de Billetes de Banco, 1892), p. 516.

<sup>22</sup> *Ibid.*, p. 11.

<sup>23</sup> *Ibid.*, p. 516-517.

<sup>24</sup> Miguel Ángel de Marco, “Pellegrini contra la langosta, 1891-1892” *Todo es Historia* 27 no. 311 (June 1993), p. 64-65.

<sup>25</sup> *Ibid.*, p. 63-64, 68.

<sup>26</sup> *La Prensa*, Buenos Aires, September 1891—May 1892.

implicitly cast the locusts themselves as foreign invaders. This characterization implied the necessity for a collective defense of the nation. Pellegrini’s proposed law in 1892 obligated citizens to immediately report any locust sightings and to use their own private property, their tools and animals, in this collective defense; it called for the creation of a Central Commission based in Buenos Aires as well as smaller regional and local sub-commissions; it offered prizes to innovations and inventions that facilitated anti-locust efforts; and it allowed the president to call up the national guard as an auxiliary force.<sup>27</sup>

Deputy Indalecio Gómez of Salta and Minister of the Interior José Zapata were the main proponents of the 1892 bill. Gómez warned that the year’s crop was expected to reach 500 million pesos, much of which was now being threatened. Zapata insisted that the new law was necessary because the one passed in 1891 failed in its intended purpose; by demanding labor only from farmers and ranchers, the law allowed anyone to escape simply by denying that they were one or the other. In any case, it was not fair that the burden fell only on them because locusts were a threat to everyone.<sup>28</sup>

The proposal sparked an intense debate in the Chamber of Deputies. Deputy Rufino Varela of Buenos Aires was the staunchest opponent of the bill, calling it “unconstitutional from start to finish.”<sup>29</sup> He insisted that the proposed remedy was far worse than the solution: “We find ourselves in the presence of a bill that, under the pretext of fighting the locust—a truly destructive plague—tramples every institution we have: our system of government, division of power, rights of individuals, the inalienable rights bestowed upon man by the constitution, in the Republic of Argentina.”<sup>30</sup>

The key issue was not the threat that locusts posed, but that the bill, in his conception, was a power-grab by the national government that threatened the very structure of government that ensured individual liberty. He noted derisively, but accurately, that the bill would potentially mean that women and the elderly would be called to duty. The bill did not specify who would pay the people so conscripted, or who would pay indemnities if their tools broke or animals died while serving. He also argued

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<sup>27</sup> *Diputados, Sesiones Ordinarias, 1892*, p. 512-513.

<sup>28</sup> *Ibid.*, p. 525, 823.

<sup>29</sup> *Ibid.*, p. 811.

<sup>30</sup> *Ibid.*, p. 817.

that the provisions forcing people to use their property in this way were unconstitutional and constituted armed seizure of property. Deputy José Olmedo of Córdoba decried the proposed obligatory labor not only as unconstitutional in Argentina but unconstitutional anywhere else, even in czarist Russia. But even were it not so, he argued, such a levy would not fix the problem. He fatalistically argued that even if every Argentine were to contribute to destroying the locust, such a task would not be accomplished. The French had deployed their entire colonial force in Algeria to the task and had accomplished, in his view, nothing.<sup>31</sup>

Authorizing the president to call out the national guard to fight locusts was another major source of controversy. Deputy Tristan Almada of Córdoba insisted that the public expected the government to act and noted that in Europe it was not unusual to call out both the national guard and the regular army to fight locusts. He insisted that the case of locusts was analogous to foreign invasion: both required a collective response. His fellow representative Andrónico Castro of Córdoba argued that the bill raised thorny questions about giving the president authority to call out the national guard to fight locusts. In any case, Castro averred, what Europeans did was irrelevant; what mattered was what the constitution of Argentina allowed.<sup>32</sup> In one debate on legal interpretation, Castro had the secretary read aloud article 67, subsection 24 of the Argentine constitution, authorizing “the deployment of the militias of all provinces, or some of them, when it is required for the enforcement of the laws of the nation, or to contain insurrections, or to repel invasions.”<sup>33</sup> Almada insisted that what was being proposed was (potentially) a law of the nation, and thus justified itself; Castro emphasized the second clause regarding the repulsion of insurrection and invasion. Each argued that the same constitutional provision supported their opposing arguments.

In the event, all the controversial provisions of the bill were deleted. The final bill, proposed by Almada, was simple. It allocated 500,000 pesos for the president to distribute among the provinces, “in the proportion that corresponds to their needs.”<sup>34</sup>

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<sup>31</sup> Ibid, p. 819, 831, 835..

<sup>32</sup> Ibid, p. 743, 744.

<sup>33</sup> Ibid, p. 744.

<sup>34</sup> Cámara de Senadores, *Diario de sesiones de la Cámara de Senadores, Período 1892* (Buenos Aires: Compañía Sud Americana de Billetes de Banco, 1893), p. 641.

What the provincial governments did with the funding was up to them. And there the matter stood for the next few years.

### THE LEGISLATION OF 1897

Locusts again ravaged the country in 1896 and 1897. *La Prensa* quoted an anonymous source who declared in early 1897 that Argentina would suffer less from a war or a plague than it had from locusts.<sup>35</sup> Food was getting scarce, for humans and for cattle.<sup>36</sup> Shortly thereafter, *La Prensa* declared, echoing a common response to the locust infestation, that Argentina needed a collective response as vigorous as that to an epidemic or a foreign invasion.<sup>37</sup> Deputy Indalecio Gómez of Salta again spearheaded the effort in congress. Speaking before the Cámara de Diputados, he called the locusts “a national calamity” and enumerated the problems they caused: rural unemployment, farmers begging for seeds, but also broader economic instability and uncertainty. The locusts scared European investors and prospective European immigrants. According to Gómez, inaction by the national government in Argentina gave the would-be immigrant the impression that “here crops are sown for locusts.”<sup>38</sup> The precipitous drop in agricultural revenue last year, he argued, could only be attributed to the devastating locust attacks, because nothing else had happened. Experience had shown that neither private initiative nor the action of provincial governments would suffice.<sup>39</sup>

Gómez insisted that only the national government could face the challenge, for individual farmers were so overwhelmed that, having lived through one locust attack, they simply gave up hope and did nothing in following ones. Worse, the provinces that did not have serious locust problems or major agricultural interests, looking no further than their own interests, did nothing and contributed nothing. As a result, Gómez claimed, it was precisely those provinces that became breeding grounds for further locust waves. Gómez, as a member of the Special Commission for Agriculture, introduced a detailed bill to defeat the locusts. He likened his bill to an improvement on the 1892 law which, he said, faced so much opposition that it wound up being

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<sup>35</sup> *La Prensa*, 21 January 1897, p. 6

<sup>36</sup> *La Prensa*, 26 January 1897, p. 4.

<sup>37</sup> *La Prensa*, 12 February 1897, p. 3.

<sup>38</sup> Diputados, *Sesiones Ordinarias*, 1897, p. 205-206.

<sup>39</sup> *Ibid.*, p. 206.

toothless and accomplished nothing. In the five years since the passage of that law, according to Gómez, locusts destroyed 350 million pesos worth of crops, despite the legislation.<sup>40</sup>

While he hoped his own bill would be more concrete, he expanded on some of the ideas contained in the 1892 law. On the one hand, he rejected the use of either the regular army or the national guard, saying they had neither the equipment nor the expertise for the task. On the other hand, he championed the compulsory use of private equipment and animals in the fight against locusts, based on eminent domain (*dominio eminente*) in Article 17 of the constitution.<sup>41</sup> The law proposed the establishment of a central commission appointed by the president. The central commission’s duties would include printing a monthly bulletin of information and advice for public consumption and drawing maps showing the progress of locusts. The central commission would appoint departmental commissions, and those would appoint local sub-commissions. Each level would answer to the level above them; they would be empowered to ask for help from provincial authorities if they so required but were not obligated to do so. The proposal also called for the institution of a labor draft that would be leveled on the entire adult population of a locality stricken by locusts (the disabled and government officials were exempt). Each person would be obliged to serve up to twenty days at a time, with at least one month separating each twenty-day period, for a maximum of three times out of a year, with remuneration. Going further than the 1892 proposals, this bill also called for the destruction of fields in which locusts had laid eggs, again with financial compensation.<sup>42</sup>

As in 1892, the bill sparked fierce opposition from some deputies. Deputy Mariano Demaría, a representative of Buenos Aires province, insisted that the labor draft was simply unconstitutional, and compared it to the notorious impressment of citizens to serve in the frontier militias.<sup>43</sup> Deputies Emilio Mitre and Santiago O’Farrell, also of Buenos Aires, defended the labor draft. As O’Farrell put it, “it helps nothing if a person exterminates the locust on their property, if their neighbor does not cooperate,

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<sup>40</sup> Ibid, p. 206.

<sup>41</sup> Ibid, p. 206-207.

<sup>42</sup> Ibid, p. 208-213.

<sup>43</sup> Ibid, p. 223-224, 275.

nor can be obligated to do so.”<sup>44</sup> O’Farrell pointed to the crux of individual action within a locality. Taking care of one’s own property was not enough; they would still be threatened by the inaction of others. Demaría countered that this was an unfounded concern, as the very nature of the problem would ensure that anyone affected by locusts would take the necessary measures. O’Farrell responded that there was demonstrable evidence that some farmers in Buenos Aires did not do so.<sup>45</sup> The collective threat posed by locusts thus complicated classical notions of individual liberty and private property.

Another legal issue the bill presented was the relationship it established between the national and provincial governments. Deputy José Miguel Guastavino of Corrientes insisted that the bill include the phrase “in agreement with the provincial authorities,” when speaking of establishing provincial commissions. Echoing Varela’s arguments five years earlier, he declared that if the bill were passed, “the authority of provincial governments, even the local governments, would no longer stand; the very municipalities would completely disappear.”<sup>46</sup> The national government’s commissions, acting on their own authority, would negate any sovereignty the provinces once had. The Minister of Justice countered that this bill said nothing about what provinces could or could not do on their own. The previous year, he argued, Buenos Aires and Santa Fe provinces had both fought locust hordes with their own resources. Buenos Aires had basically succeeded, while Santa Fe had not. The key issue, argued the minister, was not that one province could not necessarily take care of itself; the key issue was that no province could act in another province.<sup>47</sup>

Demaría insisted on the principle of provincial sovereignty, saying that no law should give the national government authority, “under the pretext of killing the locust, to interfere in the territory of the provinces to do as it wishes.” Like Guastavino and Varela, he feared that the law would simply nullify the jurisdictions of the provinces, in fact if not in law.<sup>48</sup> Deputy Emilio Mitre of Buenos Aires argued that the bill, far from unjustly taking power from the provinces, did not centralize power enough. He argued

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<sup>44</sup> Ibid, p. 250, 254-255.

<sup>45</sup> Ibid, p. 251.

<sup>46</sup> Ibid, p. 244.

<sup>47</sup> Ibid, p. 245.

<sup>48</sup> Ibid, p. 247.

that the executive branch should appoint *all* commissions, rather than having each level appoint the members beneath it. He cited as an example the experience of the British in Cyprus, who gave one engineer absolute powers, and exterminated the locust in a few years.<sup>49</sup> Thus in addition to the question of collective responsibility versus individual liberty, locusts provided another field on which to play out the contest between provincial and national authority.

Despite the acrimonious nature of the debate however, the 1897 law, unlike that passed in 1892, maintained many of the key provisions contained in the original proposal. It established a hierarchy of sub-commissions, provincial commissions, and a central commission, each reporting to the one above, with the central commission under the control of the president; it called upon all inhabitants, citizen and noncitizen, to contribute to the work of the commissions in their locality, with pay, for up to twenty days at a time, when called upon to do so (except the disabled, public servants, and railroad employees); it authorized the president to call upon the army (not the national guard) at his discretion; it allowed the destruction of fields in which locusts had laid eggs, subject to indemnification; and it established a permanent office of entomology to study locusts.<sup>50</sup>

## THE WORK OF KILLING LOCUSTS

The locust commissions began work immediately. In a letter written in October 1897 by José Francisco Acosta, the head of the Central Commission, to the Minister of Justice, Luis Beláustegui, Acosta wrote that across Córdoba, Entre Ríos, and Santa Fe provinces, and the Chaco Territory, the newly established commissions collected 18.6 million kilograms of locusts and 30,000 kilograms of eggs.<sup>51</sup> This letter was re-printed in an 1899 report by the Central Commission for the Destruction of Locusts that described the early actions and history of the anti-locust commissions. The report

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<sup>49</sup> Ibid, p. 226.

<sup>50</sup> Cámara de Senadores, *Diario de sesiones de la Cámara de Senadores, Período de 1897* (Buenos Aires: Imprenta del Boletín Oficial, 1897), p. 697-699.

<sup>51</sup> Comisión Central de Extinción de Langosta, *Memoria de los trabajos realizados durante el 1.er ejercicio con un informe especial de la inspección general, 1897-1898* (Buenos Aires: Compañía Sud-Americana de Billetes de Banco, 1899), p. 67.

noted that over 1,500 district commissions were soon established under thirty-five provincial commissions, employing a total of about 8,000 people.<sup>52</sup>

The report also praised the work of the army, noting that twenty-one battalions had participated, and were given equal rank to district commissions. Although the report does not specify what kind of labor the army carried out, it is safe to assume that the methods of fighting locusts did not change radically whether the laborer was a civilian or a soldier. In Acosta’s letter, he noted that using the army would not only save money, but it would also be more effective in sparsely populated areas.<sup>53</sup> The Central Commission also enlisted the help of Argentina’s rapidly growing railroad infrastructure.

In January 1898 the Central Commission met with several major railroad executives. They reached an agreement whereby railroads would give free transportation of all telegrams and other correspondence between the commissions, give discounted fare to equipment and people involved in anti-locust work as well as free fare for members of the central commission, and send daily reports on locust sightings by railroad personnel.<sup>54</sup> The army and the railroad companies would continue to play a role in future campaigns.

The 1899 report by the Central Commission also included the initial instructions sent out by the Central Commission to the provincial commissions in September 1897, which delineated the duties of the latter. The provincial commissions would oversee establishing the district sub-commissions and appointing their members. They would also establish procedures for tracking the locusts and warning districts of their approach. They would direct the district commissions in delineating areas in which locusts had laid their eggs; they were also empowered to offer a bounty of not more than 12 centavos per kilogram of eggs to encourage citizens to collect eggs on their own. The focus would be on destroying the eggs and the young larvae, before they reached the *saltona* stage, the stage prior to reaching adulthood.<sup>55</sup>

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<sup>52</sup> Ibid, p. 19.

<sup>53</sup> Ibid, p. 34, 65.

<sup>54</sup> Ibid, p. 32-33.

<sup>55</sup> Ibid, p. 69-71.

The instructions of 1897 included a description of different ways to kill locusts. Overall, it emphasized, it was best to kill them as early as possible, but the specific methods employed depended on the circumstances, especially the age of the locust. For destroying eggs, the basic method of plowing the land, and thus burying the locusts, was effective, but the eggs had to be buried under at least fifteen centimeters of soil so that, once hatched, the larva could not make it to the surface. The report also discussed the method of digging up the eggs and exposing them to sunlight for a few days but cautioned that this method was quite expensive and labor-intensive, and not always effective. Eggs could be collected by hand, but this was also less effective than plowing, and more expensive (for the government paying the bounties).<sup>56</sup>

The report concluded its instructions with advice on fighting the *saltona*, the adolescent stage that lasted about forty to fifty days from birth, and the *voladora*, or adult locust. Especially in the later days of the *saltona* stage, the locusts became extremely voracious. The *saltona* could be plowed, crushed, set on fire, or collected by hand for later interment. One of the most effective methods was to drag a metal barrier across a field with ditches on either side, so that the locusts were forced into the ditches. Zinc and tin were ideal because they were lightweight; some farmers had taken metal from their own sheds to construct the barriers. The new generation of locusts, once it reached adulthood, could stay one week before emigrating, or much longer. The report instructed farmers that scaring them off with noise or with bonfires containing a small amount of sulfur was an effective defensive measure.<sup>57</sup>

By 1905 the national government decided to expand the functions of the Commission for the Extinction of Locusts. In a July 1905 address to the Senate, President Manuel Quintana connected the anti-locust work with his proposal to create a new body, the Commission for Agricultural Defense, that would combat pests and other threats to agriculture and livestock: “With the offices and personnel used to fight locusts, the Executive Power has available a specially-qualified corps for the execution of any tasks necessary” for broad agricultural defense, “without additional burden on

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<sup>56</sup> Ibid, p. 82-83, 88-91.

<sup>57</sup> Ibid, p. 93-95, 97, 101.

the current budget and with the same resources destined” for the anti-locust fight.<sup>58</sup> He explicitly framed the new proposal as an expansion of the Commission for the Extinction of Locusts. One of the proponents of the bill, Senator Salvador Macía of Entre Ríos, noted another advantage: locusts only struck every few years, in between which were long periods where the commissions went dormant, and labor pools disintegrated. The establishment of a Commission for Agricultural Defense would, he argued, help the creation of a more permanent labor force to fight not only locusts, but the rabbits that were overwhelming the Pampas, diseases affecting the cotton crop, and other “plagues.”<sup>59</sup>

The 1905 Senate debate on the new proposal was less acrimonious than the debates in 1892 and 1897. Senator Bernardo de Irigoyen of Buenos Aires took issue with the bill’s giving the president power to prevent the entry of animals or plants into provinces and prevent their transfer between provinces. He insisted that the president’s power was limited to regulating the importation of plants and animals into national ports and national territories.<sup>60</sup> His opposition led to no extended debate, however, and the law ultimately gave the president such a regulatory power. The law also replicated the anti-locust legislation’s ability to compel property owners to assist officials within the bounds of their property; and to destroy planted fields in extreme cases.<sup>61</sup> The strategies, labor organization, and legal mechanisms pioneered by the anti-locust effort were thus expanded to combat other threats to agricultural prosperity in the Commission for Agricultural Defense.

## LOCAL COMMISSIONS, LOCAL OPPOSITON

Many ordinary people were decidedly unenthusiastic about participating in anti-locust efforts at first, and, as the 1899 report noted, the rich could simply pay the fee to escape the labor.<sup>62</sup> In 1899 *La Prensa* reported complaints that local commissions were dragging out their work, doing the work poorly, and intruding on the lives of

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<sup>58</sup> Cámara de Senadores, *Diario de sesiones de la Cámara de Senadores, Año 1905: Sesiones Ordinarias* (Buenos Aires: Establecimiento Tipográfico “El Comercio,” 1906), p. 684.

<sup>59</sup> *Ibid.*, p. 686-687.

<sup>60</sup> *Ibid.*, p. 689.

<sup>61</sup> Cámara de Senadores, “Leyes sancionadas en el período legislativo de 1905,” *Diario de sesiones de la Cámara de Senadores, Año 1905: Sesiones Extraordinarias* (Buenos Aires: Establecimiento Tipográfico “El Comercio,” 1906), p. cxxxv-cxxxvi.

<sup>62</sup> Comisión Central de Extinción de Langosta, *Memoria*, p. 8.

agricultural colonists. The same paper noted that one major problem was that the local commissions charged with enforcing obligatory labor laws often had close connections to the communities in which they worked.<sup>63</sup> In another article, *La Prensa* reported an “uprising” of people in Ballesteros, Córdoba, angry that the local sub-inspector was imposing fines out of a “personal vendetta”.<sup>64</sup> A 1905 article in *La Nación* reported that residents in the provinces of Santa Fe and Córdoba who were fined for not participating in the fight against locusts were angry. They argued that they already had to work overtime to save what little harvest had been spared by the locust, and didn’t have time to venture beyond their fields, much less money to pay fines.<sup>65</sup> On the other hand, some farmers supported the work. Corn growers in Rosario, for example, reportedly asked the government to continue supporting anti-locust efforts even though their crop was not currently threatened; they were worried about future invasions.<sup>66</sup>

One of the most devastating criticisms came from a 1905 letter to the editor of *La Vanguardia* from Luis N. Grüner. Grüner had participated in the 1897 anti-locust campaign in Córdoba province as a member of an infantry battalion. The work of his detachment, he wrote, was simply to travel about in a given area, checking passers-by for proof that they had served their time in the anti-locust campaigns as required by law. Most of them apparently could not produce such proof and so were dragooned by the infantry and forced to contribute their labor to the campaign. That part of Córdoba, Grüner wrote, was “like many places in the country” fairly isolated, and rarely received any more news from Buenos Aires than was brought by word of mouth. It was nearly certain that the local people were completely unaware of the new law and the labor it required of the populace. While these unfortunate people worked, apparently to no great effect, the officers lazed about in town.<sup>67</sup>

The national government noted popular concern with the anti-locust measures. A 1908 report by the Commission for Agricultural Defense noted that the local commissions, now called *seccionales*, faced strong public opposition in some cases, especially opposition to the mandatory labor service requirement. In other cases, some

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<sup>63</sup> *La Prensa*, 3 February 1899, 6; *La Prensa*, 5 March 1899, p. 5.

<sup>64</sup> *La Prensa*, 5 February 1900, p. 4.

<sup>65</sup> *La Nación*, 3 February 1905, p. 5.

<sup>66</sup> *La Nación*, 11 February 1905, p. 6.

<sup>67</sup> *La Vanguardia*, 20 September 1905, p. 2

residents declined to fight locusts on their own property and raised armed opposition when the local commission tried to do so.<sup>68</sup> Tellingly, the authors of the report referred to such opposition as “that regional *caudillismo* which has remained as a residue of past epochs and which has been such a hindrance to the development of national wealth.”<sup>69</sup> They thus explicitly connected local opposition to a past better left in the past, in which local strongmen owed no more than nominal allegiance to Buenos Aires. The authors of the report argued that to succeed, agricultural defense would have to overcome regional *caudillismo* as well as the stringent provincial autonomy that succeeded that *caudillismo* and was so much in evidence in the congressional debates of 1892 and 1897.

The report also noted problems with some of the local commissions. In Rosario de la Frontera, in Salta province, the head of the commission lived far from his post and was thus absent much of the time. An investigation by the Central Commission concluded that the local *seccional* in Rosario de la Frontera existed only on paper. In Jujuy, Concordia, and Río IV, local *seccionales* were likewise of dubious efficacy. The Commission of Agricultural Defense emphasized the importance of gaining the buy-in of the public by informing them of the dangers of locusts and efforts to fight them, as well as convincing them to participate. They pointed to the allegedly fatalistic attitude of much of the public as a problem that had to be overcome.<sup>70</sup>

Although the techniques used for fighting locusts—plowing, crushing, gathering by hand, burning, warding off with smoke—remained the same over the next few years, one successful innovation to address this problem was the transportation of laborers from one region to another. During the 1905 locust invasion, *La Nación* noted that the anti-locust commissions were moving people from regions where locust eggs had been destroyed, to areas where locusts continued to lay eggs.<sup>71</sup> The Commission for Agricultural Defense moved about eight hundred laborers from La Rioja and Catamarca to the littoral provinces of Córdoba, Entre Ríos and Santa Fe. The latter provinces were in harvest season, and thus had a shortage of labor. Even with the threat of locusts, if it was harvest season, the anti-locust commissions were competing with landlords. The

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<sup>68</sup> Comisión Central de Defensa Agrícola, *Memoria de la Comisión Central de Defensa Agrícola, correspondiente al ejercicio de 1907-1908* (Buenos Aires: Establecimiento Gráfico, M. Rodríguez Giles, 1908), p. 13-14.

<sup>69</sup> *Ibid.*, p. 14.

<sup>70</sup> *Ibid.*, p. 15-17, 20-21.

<sup>71</sup> *La Nación*, 17 February 1905, p. 5.

transfer of manpower was a big accomplishment because, according to the commission, the peasantry

of the interior of the republic generally resist leaving their native soil, above all when their destination is unknown. The love of the homeland and the lack of confidence in the promises that are made to them are two causes that hold them back with incontrovertible force. They prefer misery, with all its inconveniences, before risking the vagaries of an unknown future or the uncertainties of a precarious life.<sup>72</sup>

The commission argued that rural folk, specifically those from the “interior” had a close attachment to their locales and were skeptical of outsiders and central authority, so much so that they would prefer poverty rather than look toward a better future. The commission strongly implied that this attitude had to be changed, both to succeed in the struggle against locusts, and to modernize Argentina. The effort to literally uproot peasants, to imbue them with an attachment to the nation rather than to their hometown, was thus a crucial part of anti-locust efforts.

The commission also optimistically predicted that the alumni of this program would spread the word of the good pay that the program carried back in their home provinces. In the future, they wrote, such labor deputations should be organized in advance so they would be ready when locusts attacked. These labor teams were more than short-term band-aids; they were a mechanism of social reform as well. “A civilizing work of brotherhood will be achieved,” the commission wrote, “which will extend a common benefit, at the same time as an exchange is established which is necessary to stimulate in peoples that within our own frontiers maintain themselves in isolation and misery.”<sup>73</sup> Here again, the commission emphasized that their work would have ancillary effects beyond and perhaps more important than protecting crops from the locust: their work would contribute to integrating the disparate peoples of the Argentine nation.

It was important but difficult for the commission to find honest, hard-working people for the job—especially because the work was temporary. But the work of fighting locusts required experience: it required “a long apprenticeship, a general preparation and the experience that is only acquired through constant work, to form a well-

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<sup>72</sup> Comisión Central de Defensa Agrícola, *Memoria*, p. 23.

<sup>73</sup> *Ibid.*, p. 25.

organized corps, of iron discipline, which will not lack at any moment the necessary energy, combined with the wisdom tempered by instruction.”<sup>74</sup> What was needed was a corps of workers with military-like organization and discipline, to be ready at all times, which could not be supplied by temporary workers. This was especially important because such workers, as experience demonstrated, would invariably have to deal with intransigent local populations and officials. As one way of addressing this problem, the Commission for Agricultural Defense revised and standardized policies at a meeting in Buenos Aires before the campaign of 1907-1908 began. The attendees, all of them veterans of anti-locust campaigns, discussed and agreed upon best practices. The Commission recommended that such meetings should occur regularly going forward. About five hundred and twenty veterans of the last campaign were re-hired, in addition to over two thousand new hires over the course of the campaign.<sup>75</sup>

The Comisión de Defensa Agrícola had also begun publishing a monthly bulletin. They sent the bulletin to the affected provinces, but also to Europe, to inform would-be immigrants and investors of the progress Argentina was making against the locust. In the realm of public information, the commission reported that they had developed a primer (*cartilla*) for use in elementary schools. This was an important step in the long term. As the commission noted, “it is necessary to prepare new generations, educate them and inculcate in them the great duty that they have to defend the wealth of the nation from a devastating plague.”<sup>76</sup> Such a perspective indicated that the commission understood fighting locusts would be a multigenerational task, if not a never-ending one. It also underlined the importance of public education campaigns not just as a means of informing but as a means of obtaining popular support for the mission of agricultural defense.

According to Carlos Frers, the head of the Central Commission during the locust invasion of 1905, many farmers had in fact been won over by the efforts of the campaigns since 1897.<sup>77</sup> Nevertheless, there remained a well-known but limited toolbox for fighting locusts. It was a labor-intensive and expensive process, and the best that

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<sup>74</sup> Ibid, p. 26.

<sup>75</sup> Ibid, p. 27, 35-36, 62.

<sup>76</sup> Ibid, p. 39-40.

<sup>77</sup> *La Nación*, 5 July 1905, p. 7.

could be hoped for was to minimize the damage. A persistent problem in fighting locusts was the difficulty of reaching them when they laid eggs in unpopulated or under-populated areas. During the 1905 invasion, an official in Catamarca wrote to the commission (it is unclear whether he was writing to the central commission or a sub commission) noting that he would require additional funds to send people into these areas.<sup>78</sup> If there was a chance of eliminating the locust once and for all, the 1899 report and subsequent reports would focus on identifying a “permanent zone” of locusts somewhere in the Gran Chaco, in northern Argentina, or possibly southeastern Bolivia. The search for the permanent zone would be an important task in the fight against locusts over the next two decades.

### THE SEARCH FOR THE PERMANENT ZONE

The idea of searching for a permanent zone had been broached during the congressional debates over the 1897 legislation. Deputy Mariano Demaría admitted ignorance as to how to fight locusts, but he was pessimistic about the possibility of fighting locust hordes once they began attacking fields. He insisted that it was common knowledge that they always came from the north. Thus, he declared, Argentina should send an expedition northward to attempt to ascertain from whence precisely they came. He proposed that the congress allot 300,000-400,000 pesos to fund such an expedition to the Chaco region in the far north of the country, arguing that even if success were uncertain, it was necessary to try.<sup>79</sup> The 1899 report by the Central Commission for Extinction of Locusts stated matter-of-factly that the locusts “spread out from a focal point in the *chaqueña* region of the province of Salta and adjacent parts of the territory of the Chaco.”<sup>80</sup>

Not everyone believed in the existence of a permanent zone. Deputy Lucas Ayarragaray of Entre Ríos stridently opposed Demaría’s proposal for an exploratory expedition, insisting that it was better to fight locusts once they invaded the more central and southern provinces. Deputy Emilio Mitre concurred, sarcastically asking

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<sup>78</sup> *La Nación*, 22 February 1905, p. 6.

<sup>79</sup> Cámara de Diputados, *Diario de sesiones de la Cámara de Diputados, Año 1896: Sesiones de Prórroga* (Buenos Aires: Compañía Sud Americana de Billetes de Banco, 1897), p. 676-680.

<sup>80</sup> Comisión Central de Extinción de Langosta, *Memoria*, p. 35.

whether it might be necessary to venture into the Amazon or even North America to find the permanent zone.<sup>81</sup> Deputy Adolfo Dávila of La Rioja asserted that any effort to eradicate locusts depended on tracking them first; they didn't simply hide out in the foothills of the Bolivian Andes or the Chaco, they migrated constantly.<sup>82</sup> But the Chaco was important for another reason: it was one of the first places that methods like those employed in the locust campaigns were extended to other pests. According to Carlos Frers, these methods could be extended to fight caterpillars, which were a scourge on the cotton fields of the Chaco. This extension of functions suggests the emergence of a more comprehensive national effort to fight pests that threatened agriculture.<sup>83</sup> Indeed, this experience may have contributed to the establishment of the Commission for Agricultural Defense. But it was the Chaco's possible role as a safe haven for locusts that attracted the greatest attention from Argentine scientists and politicians.

The Gran Chaco, a large, forested region spanning the frontiers of Argentina, Bolivia, and Paraguay, had remained outside the control of Spain throughout the colonial period, despite numerous attempts at conquest. Well into the nineteenth century, most of the region was controlled by Indigenous peoples. In the 1870s and 1880s, the Argentine military conquered the southern Chaco, establishing Argentina's northern border at the Pilcomayo River, roughly where it remains today.<sup>84</sup> Nevertheless, it remained a frontier region about which Argentina's creole and mestizo population knew little. The possibility that locusts might come from the Chaco was thus a controversial one, but also one that fit well within the prevailing Argentine conception of the region as backward and potentially threatening.

In his 1906 book on the locust in Argentina, Carlos Lemée, like his predecessors, saw the identification of “centers of production” as key to destroying them, but he differed in arguing that locusts born outside these places did not emigrate to them on adulthood. He argued that no one really knew where locusts born outside these “centers of production” went, but probably many of them died. The key, then, was that the population was only stable within such areas, not that locusts born elsewhere

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<sup>81</sup> Diputados, *Sesiones de Prórroga*, 1896, p. 681-683.

<sup>82</sup> Diputados, *Sesiones Ordinarias*, 1897, p. 237.

<sup>83</sup> *La Nación*, 16 April 1905, p. 7.

<sup>84</sup> Sabato, *Buenos Aires en armas*, p. 24; Gastón Gordillo and Juan Martín Leguizamón, *El río y la frontera: movilizaciones aborígenes, obras públicas y Mercosur en el Pilcomayo* (Buenos Aires: Editorial Biblos, 2002), p. 23-25.

migrated back to them. They did not devastate the area within the center of production, he speculated, because their population was small. What caused the population to periodically explode, leading to the migration outward, no one knew.<sup>85</sup> That zone, he argued, was probably on the borderland between Bolivia and Argentina. He cited as evidence the recent expedition of Domingo Astorga, who claimed to have come upon a river island in the region, completely packed with locusts. If it could be located, he advocated establishing the base of the Central Commission within the Chaco itself, rather than Buenos Aires.<sup>86</sup>

Lemée hoped that pursuing the locust into its *chaqueño* redoubt would have ancillary benefits to the region’s development. “The exploration of the Chaco,” he wrote, “the detailed drawing of its map, the establishment of the necessary pathways of communication, would be a work of national importance and immense results for the wealth of the country, even without entering into the problem of the locust.”<sup>87</sup> Here Lemée tied ostensibly purely scientific concerns with overtly political and developmentalist ones; the locust became implicitly a symbol of the backwardness of the Chaco, and its destruction a prerequisite for solidifying the newly-conquered region as part of the nation of Argentina. For Lemée, the administrative projects that would be necessary for the location of the permanent zone—developing infrastructure and cartographic knowledge—were worth pursuing for the purposes of “colonization of that rich territory, which begins to call attention inside and outside the country.”<sup>88</sup> Much like the Commission for Agricultural Defense expressed hopes that the fight against locusts would make Argentine citizens out of provincial peasants, Lemée saw this struggle as a way to nationalize a large area over which the Argentine state still had only a tenuous hold. But that was only a hope he expressed for the future. As yet, the locust remained a scourge.

In 1919 Carlos Lizer published an account of his expedition into the Bolivian Chaco two years previously. It was, he wrote, meant to compliment a report on a similar expedition by Enrique Lynch Arribálzaga ten years earlier. The purpose of the six-

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<sup>85</sup> Carlos Lemée, *La langosta: Sus costumbres; su extinción* (La Plata: Talleres Sesé y Larrañaga, 1906), p. 46-48, 53, 55.

<sup>86</sup> *Ibid.*, p. 56-57, 60-61, 81.

<sup>87</sup> *Ibid.*, p. 62.

<sup>88</sup> *Ibid.*

member expedition was to locate, if possible, the permanent zone (here referred to as the “zone of winter refuge”) of the locusts that had been afflicting Argentina’s crop fields on and off for thirty years.<sup>89</sup> They set out from Buenos Aires on 8 June 1917, setting up camp at Carandaiti, in southeastern Bolivia, at around the end of the month. At that point, Lizer sent out a reconnaissance expedition into the Chaco to look for available water resources; meanwhile, Lizer traveled to the Ibo mission and interviewed the Franciscan prefect in the area, Bernardino de Nino, about his knowledge of locusts in the area. After the advance party returned, the expedition entered the Chaco. They stayed at Irentangüe for a week before running out of water and returning to Carandaiti. From there they traveled north to Santa Cruz de la Sierra. At that point, the group split up. Lizer traveled from Santa Cruz eastward to Corumbá, Brazil from September to October, while his assistant, the entomologist Luis F. Delétang, traveled north to Trinidad in northeastern Bolivia.<sup>90</sup>

On the journey to Santa Cruz, Lizer and his colleagues interviewed locals in different places about their experiences with locusts. At this point in the report, he also discusses information gleaned from Bernardino de Nino, though it is not clear if this is from another interview or the one mentioned earlier. According to the prefect, locusts used to come to the area about once every three years, but lately they had been coming every year. He also mentioned that in his opinion they mostly came from the region around the basin of the Pilcomayo River, the river that ran southeast from the foothills outside of Santa Cruz to join the Paraguay River near Asunción. Residents appeared to have conflicting opinions about the permanent zone. One, an inhabitant of the Izozo (also Izoso) plains between Charagua and Santa Cruz, agreed with the prefect that the permanent zone probably lay along the banks of the Pilcomayo or nearby; one thought it was probably further south than Lynch Arribálzaga had believed; another doubted it existed at all. In any case, Lizer appeared to agree with Nino about the possible location of the permanent zone.<sup>91</sup> He noted that the Commission for Agricultural Defense, which had sponsored his expedition, had set up “a cordon of observers along the length of the

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<sup>89</sup> Carlos Lizer, *Informe sobre la Expedición al Chaco Boliviano presentado a la 1.ª Comisión de Defensa Agrícola* (Buenos Aires: Talleres Gráficos del Ministerio de Agricultura de la Nación, 1919), p. 3-4.

<sup>90</sup> *Ibid.* p. 9-11.

<sup>91</sup> *Ibid.*, p. 22-24.

Pilcomayo.”<sup>92</sup> The eastern boundary, he speculated, was probably the Paraguay River, since locusts rarely attacked Corumbá, on the Brazilian side of the river. The western boundary was doubtless the Andes, but the southern boundary of the “permanent zone” was the hardest to place.<sup>93</sup>

Twenty years later, Lizer revisited this conclusion. In 1940 he wrote another report in which he concluded that his initial placement of the permanent zone was incorrect. Citing his colleague Juan B. Daguerre, he now argued that there were at least three, possibly four, permanent breeding grounds for locusts: one in Córdoba province, one in Entre Ríos, one in Uruguay and a final possible area in southern Brazil. Despite this change, he continued to advocate an offensive strategy of destroying locusts in these areas rather than waiting for them to develop into swarms and attack agricultural areas.<sup>94</sup> By the middle of the following decade, major locust attacks in Argentina seemed to have abated. By this time, anti-locust efforts had come to rely increasingly on DDT and other pesticides, often sprayed from airplanes. Observers have noted a resurgence of locusts in Argentina since 2015, but the era of massive labor mobilization, locust bounties, and the search for a permanent zone, has passed.<sup>95</sup>

## CONCLUSION

This article has shown how Argentina’s anti-locust legislation created a nationwide apparatus that sought not only to safeguard Argentina’s agricultural wealth, but to further assert the authority of the national government in the provinces and the new Chaco Territory, and to inculcate a sense of national collective identity in the *agricultores* of those far-flung regions. It is by no means an exhaustive history of locusts in turn-of-the-century Argentina, and further research is called for, especially regarding the experiences of ordinary people who were subjected to the labor draft. This paper has tentatively suggested that public reaction was ambivalent at best,

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<sup>92</sup> Ibid, p. 25.

<sup>93</sup> Ibid, p. 24-25.

<sup>94</sup> Carlos Lizer y Trelles, *La lucha moderna contra la langosta en el país* (Buenos Aires: Academia Nacional de Agronomía y Veterinaria, 1940), p. 17, 29-30; Comisión Central de Investigaciones sobre la Langosta, *Memoria de la Comisión Central de Investigaciones sobre la Langosta correspondiente al año 1936* (Buenos Aires: Ministerio de Agricultura de la Nación, 1939), p. 12-15.

<sup>95</sup> Hector A. Medina, Eduardo V. Trumper, and Arianne Cease, “The Resurgence of the South American Locust (*Schistocerca gossypioides*)” *Metalepta* 37 No. 3 (Sept. 2017), 17; Eduardo V. Trumper et al., “A Review of the Biology, Ecology, and Management of the South American Locust, *Schistocerca gossypioides* (Serville, 1838), and Future Prospects,” *Agronomy* 12 No. 1 (2022): 11-12.

[https://www.researchgate.net/publication/319987703\\_The\\_resurgence\\_of\\_the\\_South\\_American\\_locust\\_Schistocerca\\_gossypioides](https://www.researchgate.net/publication/319987703_The_resurgence_of_the_South_American_locust_Schistocerca_gossypioides).

although this conclusion may be skewed by the heavy reliance on official government reports. Those sources, as well as the others consulted here, had remarkably little to say about Indigenous people even in the Chaco Territory, where Indigenous people made up the majority of the population; how Indigenous peoples were affected by locusts or involved in efforts to fight locusts is another important avenue for future research.

The congressional debates surrounding the legislation of 1891 and 1897 suggest that national efforts at locust eradication were somewhat controversial, not because legislators did not consider locusts a threat to Argentina, but because some deputies and senators saw a creeping overreach of national authority into the provinces. Mobilizing the national guard, coercing private citizens to contribute not only their labor but their property—and giving the president the authority to do all of this—threatened yet more control from Buenos Aires over the interior and littoral provinces. Although the days of *caudillaje* and armed insurrection had passed, similar ideological conflicts continued to play out in the national legislature. The growing importance of agriculture to Argentina gave urgency to the task. The debate over the creation of the Commission for Agricultural Defense in 1905 was, by contrast, less heated, and the proponents of provincial autonomy less in evidence.

Proponents of the locust commissions hoped that their work would have benefits beyond simply safeguarding Argentina’s agriculture, as important as that was. As the Commission for Agricultural Defense noted in its 1908 report, labor drafts had the potential to imbue provincial peasants with a spirit of national identity. By sending workers to fight locusts beyond their hometowns, the commissions could both fill needed labor shortages and create a sense of common identity that would transcend local attachments and thus further bind the provinces together as a unified nation. The search for a permanent zone marked another key trend in the fight against locusts. Proponents of identifying a permanent zone explicitly identified the quest with the larger task of integrating the Gran Chaco into the larger nation of Argentina. This was important both as a “civilizing mission” in an area that was still largely populated by Indigenous peoples, and as a way to nationalize the borderlands with Paraguay and Bolivia.

## REFERENCIAS

Cámara de Diputados. Diario de sesiones de la Cámara de Diputados, Año 1892: Sesiones Ordinarias. Buenos Aires: Empresa General Belgrano, 1892.

Cámara de Diputados. Diario de sesiones de la Cámara de Diputados, Año 1897: Sesiones Ordinarias. Buenos Aires: Compañía Sud-Americana de Billetes de Banco, 1897.

Cámara de Diputados. Diario de las Sesiones de la Cámara de Diputados, Año 1897: Sesiones de Prórroga. Buenos Aires: Compañía Sud-Americana de Billetes de Banco, 1898.

Cámara de Senadores. Diario de sesiones de la Cámara de Senadores, Año 1891. Buenos Aires: Compañía Sud-Americana de Billetes de Banco, 1892.

Cámara de Senadores. Diario de sesiones de la Cámara de Senadores, Período 1892. Buenos Aires: Compañía Sud Americana de Billetes de Banco, 1893.

Cámara de Senadores. Diario de sesiones de la Cámara de Senadores, Período de 1897. Buenos Aires: Imprenta del Boletín Oficial, 1897.

Cámara de Senadores. Diario de sesiones de la Cámara de Senadores, Año 1905: Sesiones Ordinarias. Buenos Aires: Establecimiento Tipográfico “El Comercio,” 1906.

Cámara de Senadores. Diario de sesiones de la Cámara de Senadores, Año 1905: Sesiones Extraordinarias. Buenos Aires: Establecimiento Tipográfico “El Comercio,” 1906.

Cámara de Senadores. Diario de sesiones de la Cámara de Senadores, Año 1908: Sesiones Ordinarias. Buenos Aires: Establecimiento Tipográfico «El Comercio», 1908.

Carter, Eric D. *Enemy in the Blood: Malaria, Environment, and Development in Argentina*. Tuscaloosa: The University of Alabama Press, 2012.

Comisión Central de Defensa Agrícola. *Memoria de la Comisión Central de Defensa Agrícola, correspondiente al ejercicio de 1907-1908*. Buenos Aires: Establecimiento Gráfico, M. Rodríguez Giles, 1908.

Comisión Central de Extinción de Langosta. *Memoria de los trabajos realizados durante el 1.er ejercicio con un informe especial de la inspección general, 1897-1898*. Buenos Aires: Compañía Sud-Americana de Billetes de Banco, 1899.

Comisión Central de Investigaciones sobre la Langosta. *Memoria de la Comisión Central de Investigaciones sobre la Langosta correspondiente al año 1936*. Buenos Aires: Ministerio de Agricultura de la Nación, 1939.

De Marco, Miguel Ángel. “Pellegrini contra la langosta, 1891-1892.” *Todo es Historia* 27 no. 311 (June 1993): 62-73.

Deveson, Edward and Alejandro Martínez. “Locusts in Southern Settler Societies: Argentine and Australian Experience and Responses, 1880-1940.” In *Environmental History in the Making*, edited by Estelita Vaz Cristina, Joanaz de Melo, and Lígia M. Costa Pinto, 259-286. Cham, Switzerland: Springer International Publishing, 2017.

Fernandes, Valéria Dorneles. “Combate à praga de gafanhotos na América do Sul: diferentes técnicas apresentadas pelo Almanaque do Ministerio de Agricultura de la Nación (Argentina, 1925-1952).” *Estudios Rurales* 8 (October 2018): 232-256.

Fernandes, Valéria Dorneles. “A praga de gafanhotos no Sul da América: Argentina, Brasil e Uruguai (1890-1950).” *Fronteiras: Journal of Social, Technological and Environmental Science* 7 No. 3 (Sept.-Dec. 2018): 145-160. <http://dx.doi.org/10.21664/2238-8869.2018v7i3.p145-160>.

Few, Martha. “Killing Locusts in Colonial Guatemala.” In *Centering Animals in Latin American History*, edited by Martha Few and Zeb Tortorici, 62-92. Durham: Duke University Press, 2013.

Freitas, Frederico. *Nationalizing Nature: Iguazu Falls and National Parks at the Brazil-Argentina Border*. Cambridge: Cambridge University Press, 2021.

Gordillo, Gastón, and Juan Martín Leguizamón. *El río y la frontera: movilizaciones aborígenes, obras públicas y Mercosur en el Pilcomayo*. Buenos Aires: Editorial Biblos, 2002.

Kelly, Matthew, Claudia Leal, Emily Wakild, and Wilko Graf von Hardenberg. Introduction to *The Nature State: Rethinking the History of Conservation*. Edited by Wilko Graf von Hardenberg, Matthew Kelly, Claudia Leal, and Emily Wakild, 1-15. London: Routledge, 2017.

Lemée, Cárlos. *La langosta: Sus costumbres; su extinción*. La Plata: Talleres Sesé y Larrañaga, 1906.

Lizer, Carlos. *Informe sobre la Expedición al Chaco Boliviano presentado a la 1.ª Comisión de Defensa Agrícola*. Buenos Aires: Talleres Gráficos del Ministerio de Agricultura de la Nación, 1919.

Lizer y Trelles, Carlos. *La lucha moderna contra la langosta en el país*. Buenos Aires: Academia Nacional de Agronomía y Veterinaria, 1940.

Lynch, John. “The River Plate Republics from Independence to the Paraguayan War.” In *The Cambridge History of Latin America Volume 3*, edited by Leslie Bethell, 615-676. Cambridge: Cambridge University Press, 1985.

Medina, Hector A., Eduardo V. Trumper, and Arianne Cease. “The Resurgence of the South American Locust (*Schistocerca cancellate*).” *Metalepta* 37 No. 3 (Sept. 2017): 17-

21.

[https://www.researchgate.net/publication/319987703\\_The\\_resurgence\\_of\\_the\\_South\\_American\\_locust\\_Schistocerca\\_cancellata](https://www.researchgate.net/publication/319987703_The_resurgence_of_the_South_American_locust_Schistocerca_cancellata).

Ortiz Yam, Inés and María Cecilia Zuleta. “Asuntos de vecinos.” *Historia Mexicana* 70 No. 1 (July-September 2020): 313-374.

Sabato, Hilda. *Buenos Aires en armas: La revolución de 1880*. Buenos Aires: Siglo Veintiuno, 2008.

Scobie, James R. *Revolution on the Pampas: A Social History of Argentine Wheat, 1860-1910*. Austin: University of Texas, Austin, 1964.

Scott, James C. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale University Press, 1998.

Rock, David. *State Building and Political Movements in Argentina, 1860-1916*. Stanford: Stanford University Press, 2002.

Rogers, Thomas D. *The Deepest Wounds: A Labor and Environmental History of Sugar in Northeast Brazil*. Chapel Hill: The University of North Carolina Press, 2010.

Trumper, Eduardo V., Arianne J. Cease, María Marta Cigliano, Fernando Copa Bazán, Carlos E. Lange, Héctor E. Medina, and Rick P. Overson, et al., “A Review of the Biology, Ecology, and Management of the South American Locust, *Schistocerca cancellata* (Serville, 1838), and Future Prospects,” *Agronomy* 12 No. 1 (2022). <https://doi.org/10.3390/agronomy12010135>.

## “Una Calamidad Nacional”: Programas para la Destrucción de la Langosta en Argentina, ca. 1890-1920

### RESUMEN

A fines del siglo XIX, el gobierno nacional de Argentina inició un programa de combatir las invasiones de langosta que habían afligido el país y amenazado su riqueza agrícola. Este programa alzó cuestiones importantes sobre la autoridad del estado nacional y la de las provincias. La oposición en el congreso caracterizó el proyecto como una intrusión inconstitucional al poder y la autoridad de las provincias. Sin embargo, con la legislación de 1897 se creó una red de comisiones dedicados a la extinción de la langosta. Esta legislación y el programa que inició revelaron un intento por parte del gobierno nacional no sólo de proteger la prosperidad económica de la nación, sino de inculcar en los agricultores de las provincias y territorios un sentimiento de identidad nacional. La búsqueda por una “zona permanente” o “zona invernada” en el norte del país, donde se suponía que las langostas vivieran durante el invierno, también representó una oportunidad de integrar el recién conquistado Chaco Austral a la nación.

**Palabras clave:** langosta; Chaco; agricultura; defensa agrícola.

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