



## Counting the Cost of the New World Screwworm: Economic Exposure of Black Cattle Producers and Black Households in Texas

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### Abstract

The reintroduction of the New World screwworm (NWS, *Cochliomyia hominivorax*) into Texas in June 2026, the first confirmed cases in the state since 1966, marks the return of a livestock parasite whose earlier presence cost the Texas economy hundreds of millions of dollars a year before its eradication. This paper develops a distributional economic assessment of a renewed NWS outbreak and asks who in Texas is most exposed to its costs. Drawing on USDA Animal and Plant Health Inspection Service loss estimates, the 2022 Census of Agriculture, USDA Economic Research Service price and food-security data, and Texas A&M AgriLife sector analyses, the paper reports three findings. First, a 1976-scale outbreak would, after inflation adjustment, impose roughly \$732 million in direct losses on Texas livestock producers and about \$1.8 billion on the broader state economy. In comparison, contemporary sector models estimate potential losses to the cattle industry at nearly \$2.1 billion. Second, Black producers are structurally over-exposed within that aggregate. Texas is home to more Black producers (11, 511) than any other state. Nearly half of Black-operated farms nationally specialize in cattle. These operations are disproportionately small and capital-constrained, and a large share are encumbered by heirs' property arrangements that have long impeded access to USDA credit and disaster relief. Third, on the demand side, Black Texas households, which already experience food-insecurity rates more than double those of white households, face additional strain from beef price increases that have pushed retail beef to record highs at a time when the U.S. cattle herd is at its lowest level in three-quarters of a century. The paper concludes that a single statewide loss figure hides a sharply uneven incidence, and that an effective NWS response should write explicit equity provisions into surveillance, treatment subsidy, and disaster-relief design.

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### 1. Introduction

In the first week of June 2026, the U.S. Department of Agriculture confirmed the presence of the New World screwworm in a three-week-old calf in La Pryor, Texas, roughly fifty miles from the Mexican border. Within days, the count rose to five confirmed detections across the state, including a calf in La Salle County and a goat in Gillespie County, as well as a case in neighboring New Mexico. These were the first confirmed screwworm cases in Texas since 1966, the year the United States

declared the pest eradicated within its borders.<sup>[1]</sup> The detections reignited fears of a parasite that an earlier generation of ranchers had regarded as a closed chapter in agricultural history. The policy response has been swift but contested. Agriculture Secretary Brooke Rollins, briefing reporters at the Knipling-Bushland U.S. Livestock Insects Research Laboratory in Kerrville, described the federal approach (quarantines, expanded trapping and surveillance, and the aerial and ground release of roughly ten million sterile flies per week) as a revival of the same Sterile Insect Technique that defeated the pest in the mid-twentieth century. Texas Agriculture Commissioner Sid Miller criticized that response as too slow and urged immediate deployment of an insecticide-and-sterile-fly system. Rollins, in turn, called Miller's suggestion that ranchers might decline to report cases "dangerous." Behind the political exchange sits a substantive economic question that has drawn comparatively little structured attention: if the pest establishes itself, who bears the cost?

This paper argues that the headline loss figures, a Texas economy impact of the order of \$1.8 billion,<sup>[2]</sup> and cattle-sector exposure near \$2.1 billion,<sup>[3]</sup> are useful for conveying scale but obscure a sharply uneven distribution of harm. The incidence of an NWS outbreak aligns with existing inequality in Texas agriculture and the Texas food economy. The findings reinforce a broader policy-economy literature suggesting that economic shocks rarely affect all populations uniformly. Instead, preexisting differences in resource ownership, institutional access, and economic resilience frequently determine the distribution of losses and recovery outcomes among affected populations (Osho, 2025). On the production side, Black cattle producers face structural disadvantages in herd size, capitalization, and access to federal credit and relief. On the consumption side, Black households face beef-price increases from a position of materially higher food insecurity. The paper sets out to make this distributional dimension explicit and, where the data allow, to quantify it.

The analysis proceeds in seven sections. Section 2 reviews the biology and the historical economics of NWS in Texas. Section 3 states the research questions, data sources, and analytical design. Section 4 quantifies aggregate and sectoral

loss exposure. Section 5 develops the production-side incidence on Black farmers and ranchers. Section 6 turns to the demand side: food supply, beef prices, and economic strain on Black Texas households. Section 7 discusses policy implications and concludes.

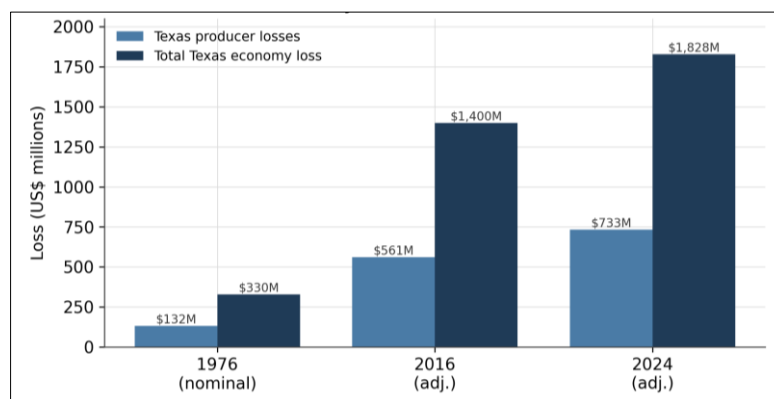
## 2. Background: The Screwworm and Its Economic History

### 2.1. Biology and Mechanism of Loss

The New World screwworm is a parasitic fly whose females deposit eggs at the margins of open wounds on living, warm-blooded animals. On hatching, the larvae feed on living tissue, which sets the screwworm apart from most blowflies that consume only dead tissue, and they produce expanding, often lethal lesions. Infestation can begin at a wound as minor as a tick bite, a fresh brand, or a healing castration or ear-tag site. Cattle, sheep, goats, wildlife (notably deer), pets, and, in rare cases, humans are all susceptible.<sup>[4]</sup> The economic mechanism is therefore not a food-safety hazard, since the parasite does not render meat unsafe. Still, a food-production hazard that operates through animal mortality, reduced weight gain and reproduction, heavier labor and veterinary inputs, and the cost of medication and inspection.

### 2.2. The Historical Record in Texas

The screwworm was a recurring scourge of southwestern livestock through the mid-twentieth century. USDA records indicate that, before eradication, southwestern producers lost between \$50 and \$100 million a year (in unadjusted dollars), and the Southwest Eradication Area program, which covered Texas, New Mexico, Arkansas, Louisiana, and Oklahoma, ultimately cost \$32 million before it was declared a success in 1966.<sup>[5]</sup> Even after eradication, maintaining a barrier zone along the U.S.–Mexico border did not fully insulate Texas. A documented 1976 outbreak infested an estimated 1.49 million cattle and 332,600 sheep and goats, and an economic analysis of that episode found that Texas producers spent \$132.1 million that year responding to the pest, with a total state-economy impact of \$330 million in then-current dollars.<sup>[6]</sup> Adjusting those figures for inflation alone yields the escalation shown in Figure 1.



**Fig 1:** Estimated Economic Impact of a 1976-Scale NWS Outbreak in Texas, Inflation-Adjusted to 2016 and 2024 Dollars

<sup>1</sup> Texas Public Radio, "USDA rebukes Texas Agriculture Commissioner Sid Miller over screwworm comments," June 8, 2026; CNBC, June 8, 2026.

<sup>2</sup> U.S. Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), Veterinary Services. New World Screwworm Ready Reference Guide – Historical Economic Impact. January 2025.

<sup>3</sup> Texas A&M AgriLife Research and Extension Service. New World Screwworm Fact Sheet. May 2025; Texas A&M AgriLife, "What is the New World screwworm and why does it matter to Texas?" (2025).

Adjusted to 2024 dollars, a 1976-scale outbreak corresponds to roughly \$732 million in direct producer losses and approximately \$1.8 billion in total state-economy impact. As USDA cautions, this inflation-only adjustment is an approximation: the 2024 Texas cattle inventory (about 12 million head) is substantially larger than in 1976, while sheep and goat numbers are smaller, and husbandry, veterinary practice, output multipliers, and infestation rates have all changed. The figure should be read as an order-of-magnitude indicator rather than a point forecast.

### 3. Research Questions, Data, and Analytical Design

#### 3.1. Research questions

The study is organized around three questions:

- RQ1. What is the plausible magnitude of economic loss

to Texas from a re-established NWS outbreak, at the aggregate and cattle-sector levels?

- RQ2. To what extent, and through what structural channels, are Black cattle producers in Texas disproportionately exposed to those production-side losses?
- RQ3. How would the downstream effects of an outbreak, working through beef supply and price, interact with the existing food insecurity of Black Texas households to produce uneven economic strain?

#### 3.2. Data sources

The analysis is built entirely on authoritative public data, so the estimates stay transparent and reproducible. Six sources anchor the work, summarized in Table 1.

**Table 1:** Principal Data Sources and Their Analytical Role

Source	Content used	Role in analysis
USDA APHIS (2025).	Historical and inflation-adjusted NWS loss estimates for Texas	Aggregate loss magnitude (RQ1)
Texas A&M AgriLife (2025).	Sector loss models: cattle and wildlife	Sector exposure (RQ1)
USDA NASS (2022). Ag Census	Producer counts by race, farm size, specialization, and tenure	Producer incidence (RQ2)
USDA ERS (2026).	Retail/farm beef prices; food-price outlook; food security	Price and demand strain (RQ3)
U.S. BLS / AFBF (2026)	Consumer beef price series	Price escalation (RQ3)
NAACP LDF; Farm Aid	Heirs' property and credit-access history	Structural vulnerability (RQ2)

*Note:* All sources are publicly available. The paper performs secondary analysis and inflation adjustment; it does not collect primary survey data.

#### 3.3. Analytical approach

The design is a mixed quantitative-descriptive incidence analysis. For RQ1, published loss estimates are compiled, harmonized to a common (2024) price level where feasible, and presented alongside their methodological caveats. For RQ2, an *exposure-share framework* is applied. The relevant question is not whether Black producers face a higher per-animal infestation rate, since the parasite does not select its hosts by ownership, but whether the same physical shock translates into a larger proportional loss of income, equity, and operating continuity given a producer's herd size, capital reserves, and institutional access. For RQ3, beef price movements are examined alongside race-disaggregated food-insecurity rates and household budget shares to gauge the direction and relative magnitude of consumer strain.

Three limitations are stated at the outset. First, race-disaggregated, county-level NWS loss data do not exist; the production-side argument is therefore structural and inferential rather than based on observed differential losses. Second, the contemporary sector estimates originate from different models with different scopes and base years and are not strictly additive. Third, the outbreak is ongoing as of this writing, so all forward-looking magnitudes are conditional on the establishment scenario rather than realized outcomes. These limitations are revisited in Section 7.

#### 4. Aggregate and Sectoral Loss Exposure (RQ1)

Contemporary estimates of Texas's exposure to an NWS reintroduction range widely, reflecting differences in scope. The USDA inflation-adjusted figure of approximately \$1.8 billion captures the broad state economy under a 1976-scale event. Texas A&M AgriLife analyses, framed around current herd values and the state's exceptionally large wildlife economy, place conservative cattle-sector losses near \$2.1 billion and hunting and wildlife-related losses as high as \$9 billion.

The Federal Reserve Bank of Dallas has estimated that an outbreak on the scale of the 1972 event, when roughly 90,000 cases were recorded nationally, could cost the Southwest more than \$3 billion.<sup>7</sup> Figure 2 arrays these estimates. They are best read as complementary lenses than as line items to be summed. The broader economic consequences of agricultural shocks extend beyond direct producer losses and often generate substantial multiplier effects throughout regional economies. Similar approaches to estimating indirect and induced economic impacts have been employed in regional economic impact analyses, demonstrating that sector-specific disruptions frequently produce economy-wide effects through employment, income, and expenditure channels (Quddus *et al.*, 2022).

<sup>7</sup> Federal Reserve Bank of Dallas, as reported in CNN, "Flesh-eating New World screwworm detected in Texas calf," June 3, 2026.

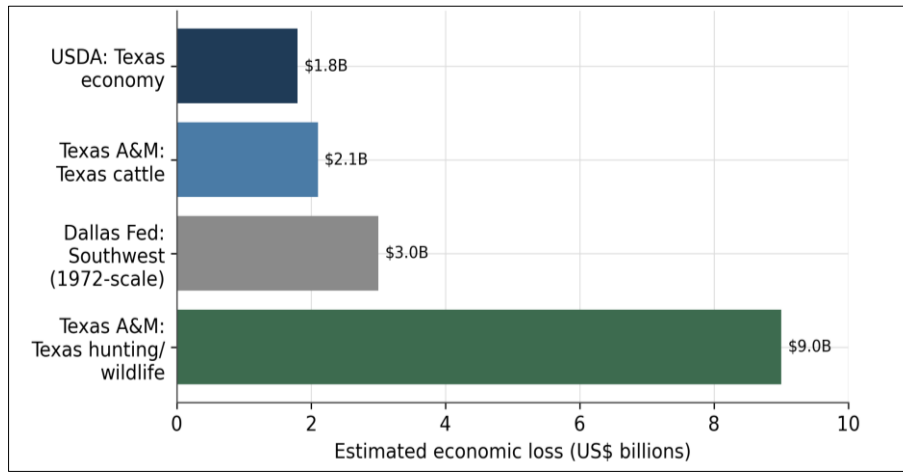


Fig 2: Contemporary Estimates of Potential NWS Loss Exposure

Texas is the natural epicenter of national concern because it produces more beef than any other state and holds a cattle and calf inventory of approximately 12.5 million head, according to the 2022 Census.<sup>[8]</sup> Table 2 decomposes the inflation-

adjusted 1976-scale loss to show the channels through which producer costs accrue. That structure is central to the equity argument because each channel scales differently for small and large operations.

Table 2: Inflation-Adjusted Components of a 1976-Scale NWS Outbreak in Texas

Loss component	1976 (\$)	2016 (\$)	2024 (\$)
Cattle cost per case	\$81.51	\$346.28	\$452.14
Sheep & goat cost per case	\$32.38	\$137.56	\$179.61
Total cattle cost	\$121.3M	\$515.4M	\$672.9M
Total sheep & goat cost	\$10.8M	\$45.8M	\$59.7M
Texas producer losses	\$132.1M	\$561.1M	\$732.6M
Texas economy loss	\$329.6M	\$1,400.2M	\$1,828.3M

Source: USDA APHIS (January 2025), adjusted for inflation only. Per-case costs reflect mortality, treatment, additional labor, and inspection.

5. Production-Side Incidence: Black Cattle Producers (RQ2)

5.1. The scale of Black cattle production in Texas

Texas is the single most important state for Black agriculture

in the United States. The 2022 Census of Agriculture counted 11,511 Black producers in Texas, more than in any other state and well ahead of Mississippi (6,380) and Alabama (3,717).<sup>[9]</sup> Figure 3 places Texas in a national context.

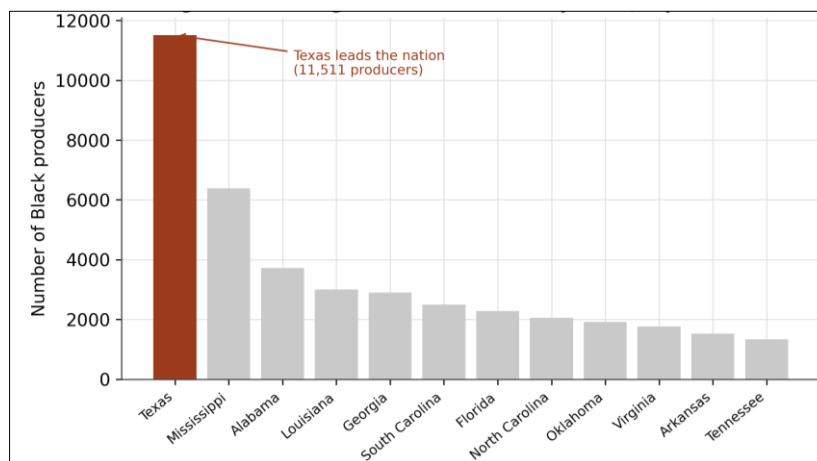


Fig 3: Black Agricultural Producers by State, Top 12 (2022)

The exposure of these producers to an NWS outbreak runs mainly through cattle. Nationally, nearly half (45%) of Black-operated farms specialize in cattle and dairy, almost entirely beef cattle, the single largest specialization category by a wide margin (Figure 4). Of the 32,653 Black-operated

farms in the United States, 14,542 specialized in beef cattle. Because beef cattle are precisely the enterprise most directly attacked by the screwworm, the production-side risk for Black producers is concentrated rather than diversified away.

<sup>8</sup> USDA National Agricultural Statistics Service (NASS), 2022 Census of Agriculture – Black Producers Highlights (ACH22-10), June 2024.

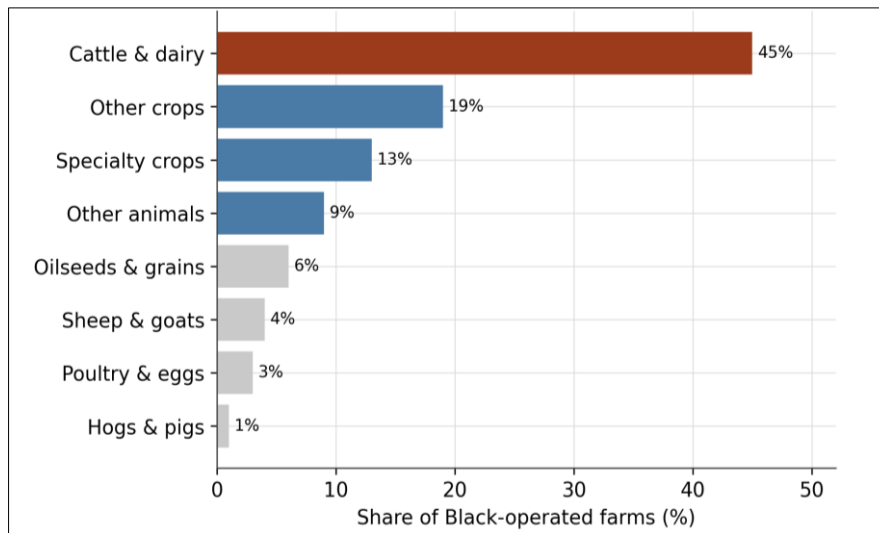


Fig 4: Farm Specialization of Black-Operated Farms, U.S. (2022)

**5.2. Why the same shock lands harder: size, capital, and tenure**

The parasite infests animals regardless of the owner’s race or wealth. The uneven incidence arises downstream, from the structural characteristics of Black-operated farms. Three features matter most—first, scale and margin. Black-operated farms are small: 84% operate fewer than 180 acres (versus 70% of all U.S. farms), and the average Black-operated farm is 163 acres. 55% of Black-operated farms reported combined sales and government payments of under \$5,000 in 2022, compared with 41% of all farms, while only 12% reached the \$50,000 threshold, compared with 27% of all farms. A fixed per-case treatment and mortality cost, on the order of \$452 per infested animal in 2024 terms (Table 2), consumes a far larger share of a small herd’s gross revenue, and a single death represents a larger fraction of the breeding base. Previous research on livestock production economics has shown that production shocks and animal-health-related expenditures disproportionately affect smaller producers because fixed costs represent a larger share of operating income and available working capital. Consequently, disease outbreaks often create greater financial stress among small-scale livestock operations than among larger, better-capitalized producers (Osho, 2006).

Second, capital and liquidity. The same census shows Black-

operated farms generated \$2.8 billion in sales in 2022 (0.5% of the U.S. total) while receiving only \$78 million in government payments. Thin cash reserves and limited payment history reduce the capacity to absorb an unbudgeted animal-health shock, to finance intensified inspection labor, or to weather the revenue gap created by movement restrictions and quarantine.

Third, land tenure and institutional access. An estimated 40% of land owned by Black farmers is held as heirs’ property, that is, land passed down without a clear title. [10] Without a clear title, operators have long struggled to obtain a USDA farm number, which is a prerequisite for many USDA programs, including lending and disaster relief. USDA itself treats fractured heirs’ title as the single largest driver of involuntary land loss among Black landowners, tied to somewhere between 4.7 and 16 million acres lost over the past century. [11] Layered on top of the documented history of discrimination in USDA lending, acknowledged in the Pigford settlements, these tenure barriers mean that the relief channels meant to cushion an outbreak are least accessible to the producers least able to self-insure. Table 3 summarizes the contrast. A statewide loss estimate, spread evenly on paper, will in practice fall with disproportionate weight on operations with the least capacity to recover, and Black producers are over-represented in that vulnerable tier.

Table 3: Structural Exposure of Black-Operated Farms versus All U.S. Farms (2022)

Indicator	Black-operated	All U.S. farms
Farms under 180 acres	84%	70%
Average farm size (acres)	163	463
Sales + payments under \$5,000	55%	41%
Sales + payments \$50,000 or more	12%	27%
Average producer age (years)	60.8	58.1
Share specializing in cattle/dairy	45%	40% (beef+grain land)
Land held as heirs’ property (est.)	~40%	n/a

Sources: USDA NASS 2022 Census of Agriculture, Black Producers Highlights; NAACP LDF; Farm Aid. The age figure compounds vulnerability, as older operators face higher labor burdens due to intensified inspections.

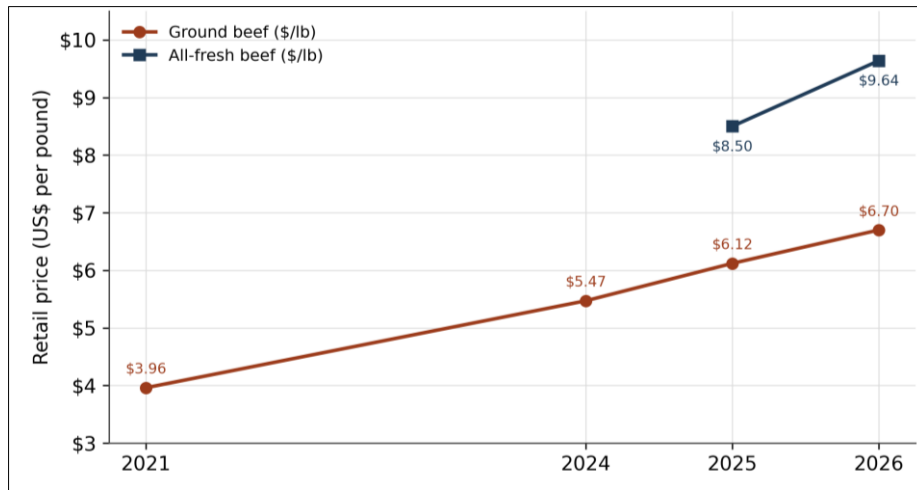
<sup>10</sup> NAACP Legal Defense Fund, “Black Farmers FAQ” (2026); Farm Aid, “Heirs’ Property and the 90% Decline in Black-Owned Farmland” (2022); USDA recognizes heirs’ property as the leading cause of Black involuntary land loss.

**6. Demand-Side Incidence: Food Supply and Strain on Black Texas (RQ3)**

**6.1. An outbreak amplifies an already tight beef market**

The screwworm arrives in an unusually fragile market. The U.S. cattle herd stands at its lowest level in roughly three-quarters of a century, the result of years of drought and high operating costs that have driven ranchers to liquidate them

herds (Osho, 2007). Retail beef prices have set successive records. In March 2026, a pound of ground beef averaged about \$6.70, roughly 16% above the year before, and by April 2026, the all-fresh beef category had reached a record \$9.64 per pound at retail, up about 13% over the previous 12 months. <sup>[12]</sup> USDA ERS projects beef and veal prices to rise about 12% in 2026. <sup>[13]</sup> Figure 5 traces the escalation.

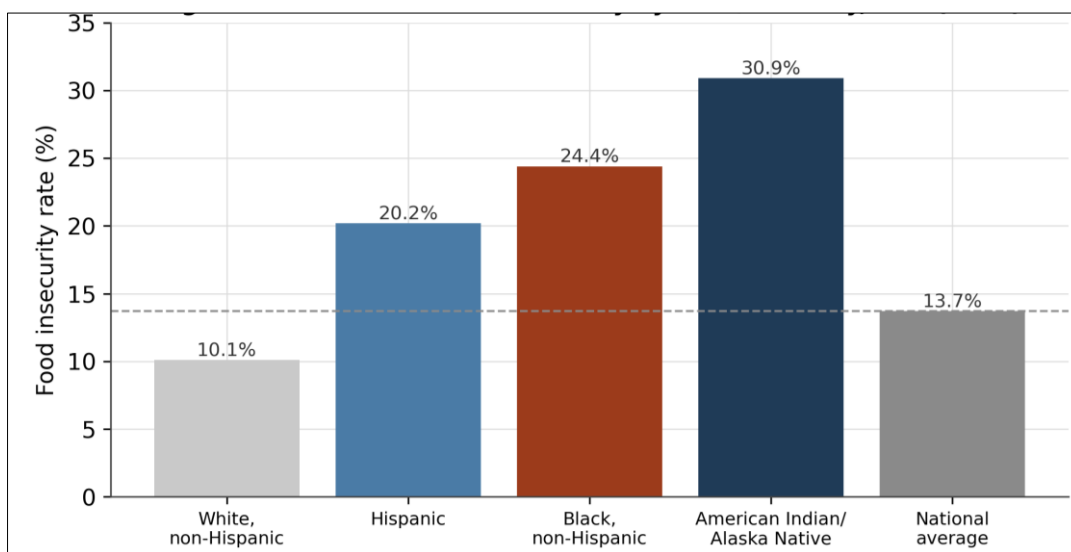


**Fig 5:** Retail Beef Price Escalation, 2021–2026

NWS-related restrictions are already a named contributor to this tightness: disruptions tied to screwworm controls along the southern border, including the suspension of Mexican cattle imports, have further constrained the domestic cattle supply. An outbreak that establishes within Texas would compound this through animal mortality, quarantine-related movement restrictions, and reduced reproductive performance, pushing prices higher at the very moment supply is least able to respond. Secretary Rollins has stressed that the situation is a food-production rather than a food-safety problem. That distinction matters for public health, but it offers no relief at the checkout counter.

**6.2. Why higher beef prices strain Black Texas households more**

The consumer burden of higher beef prices is regressive and sits atop a baseline of food security that is already sharply unequal. Nationally in 2024, 24.4% of Black (non-Hispanic) households were food insecure, more than double the 10.1% rate for white households, against a national average of 13.7%. Households in the South, where most Black Texans live, recorded the highest regional rate at 15.0%. Figure 6 displays the disparity.



**Fig 6:** Household Food Insecurity by Race/Ethnicity, U.S. (2024)

<sup>12</sup> U.S. Bureau of Labor Statistics; USDA ERS Food Price Outlook; American Farm Bureau Federation, Market Intel (May 2026).

<sup>13</sup> USDA Economic Research Service, Household Food Security in the United States in 2024 (ERR-358), December 2025.

Local data sharpen the picture. In the Dallas–Fort Worth metro, an estimated one in three Black residents was food insecure as of 2024, up from roughly one in five in 2022. When a dietary staple rises in price, lower-income and food-insecure households, which spend a larger share of their income on food and have smaller buffers, absorb the increase through a mix of reduced quantities, substitution toward cheaper proteins, and more difficult budget trade-offs with rent, utilities, and medical costs. Beef’s cultural place in Texas does not exempt it from this pressure (Osho, 2001). The economic burden associated with food insecurity extends beyond nutrition outcomes and frequently interacts with broader socioeconomic challenges. Evidence from recent

empirical studies indicate that lower-income households are particularly vulnerable to adverse health and welfare outcomes when food prices rise or purchasing power declines (Amadi & Osho, 2025). For many households, losing access to it results in a lower standard of living. Table 4 connects the supply shock to this household-level channel. Earlier studies of meat consumption behavior have demonstrated that increases in meat prices often lead lower-income households to reduce consumption, substitute toward less expensive protein sources, or reallocate spending from other household necessities. Such responses are particularly pronounced when households are already operating under significant budget constraints (Osho & Nazemzadeh, 2005).

**Table 4:** Transmission from NWS Outbreak to Household Strain

Channel	Mechanism	Differential incidence
Supply contraction	Mortality, quarantine, and lower reproduction reduce cattle supply	Adds to the 75-year-low herd; price pressure
Price escalation	Tighter supply raises retail beef prices further	Regressive; larger budget share for low-income
Food access	Higher prices reduce the affordability of a staple protein	Black HH food insecurity 24.4% vs 10.1% white
Coping cost	Substitution, reduced intake, and budget trade-offs	Smaller buffers among food-insecure households

Sources: USDA ERS (2026); USDA NASS; American Farm Bureau Federation; North Texas Food Bank. HH = households.

## 7. Discussion and Policy Implications

Taken together, the findings point to one conclusion: the cost of a New World screwworm reintroduction in Texas is real, large, and unevenly shared. The aggregate magnitude, on the order of \$1.8 billion to the state economy and roughly \$2.1 billion to the cattle sector under contemporary models, is reason enough for aggressive containment. However, that aggregate hides an incidence that follows existing inequality on both sides of the market. On the production side, Black cattle producers, concentrated in small beef operations with thin capital and often encumbered titles, would take a larger proportional hit and have the least access to the relief meant to cushion it. On the demand side, Black Texas households, already food insecure at more than twice the white rate, would absorb higher beef prices with little slack to give.

Four policy implications follow. First, surveillance and reporting must reach small and limited-resource producers. The public dispute over whether ranchers will report cases is a reminder that the containment program is only as strong as its weakest link in reporting. Outreach through 1890 land-grant institutions, including Prairie View A&M University, and through trusted community organizations can help close that gap among producers who are wary of federal agencies. Second, treatment and inspection cost-share should be scaled to the size of the operation. A flat-per-animal subsidy underserves the small producer, for whom fixed costs weigh most heavily. A sliding-scale or floor-based design would better match relief to need.

Third, disaster relief must be accessible to heirs’ property operators. The alternative-documentation provisions authorized in the 2018 Farm Bill should be actively implemented and publicized to ensure that title status does not bar the most vulnerable producers from receiving emergency assistance during an outbreak.

Fourth, nutrition policy should anticipate price transmission. Because the consumer burden is regressive, contingency planning for food-assistance capacity, including food banks and federal nutrition programs, should be part of the agricultural response rather than separate from it (Ojumu *et al.*, 2025).

### 7.1. Limitations and future research

This assessment is limited by the absence of race-disaggregated, georeferenced loss data, so the production-side incidence rests on structural reasoning rather than on observed differential outcomes. Future work should pair county-level NWS case data, as they accumulate through the new state reporting system, with the spatial distribution of Black-operated farms to produce direct estimates (Solomon & Nazemzadeh, 2003). A formal computable model linking herd dynamics, price elasticities, and household budget shares would sharpen the demand-side magnitudes offered here (Osho, 2025).

Finally, the realized severity of the 2026 episode, which depends on the success of the sterile-fly campaign, will determine which scenario in this paper proves most relevant.

## 8. Conclusion

The New World screwworm represents more than the return of a destructive livestock parasite to Texas. It is also a test of whether agricultural emergency policy can protect both the overall economy and the communities most vulnerable within it. The historical record shows that the screwworm was defeated once through sustained public investment, scientific coordination, sterile insect release, producer participation, and strong surveillance. That history gives reason to be confident that renewed containment is possible. However, the central argument of this study is that successful containment cannot be measured solely by statewide loss estimates, cattle-sector totals, or the speed of biological eradication. A response that prevents large aggregate losses while overlooking the producers and households least able to absorb the shock would be incomplete, because it would solve the outbreak statistically while allowing its burden to fall unevenly in practice.

The evidence presented in this study demonstrates that a renewed screwworm outbreak would impose substantial economic exposure on Texas. Historical loss estimates from USDA APHIS indicate that a 1976-scale outbreak, adjusted to contemporary values, would result in hundreds of millions of dollars in direct producer losses and more than a billion

dollars in broader state economic effects (USDA APHIS, 2025). Contemporary sector assessments also indicate that cattle industry losses could be very large, especially in a state where cattle production remains central to agricultural income and regional employment (Texas A&M AgriLife Research and Extension Service, 2025). These figures establish the seriousness of the threat, but they do not reveal how the cost is distributed across producers, households, and communities.

The distributional evidence is therefore the most important contribution of this analysis. Black cattle producers in Texas are not necessarily more biologically exposed to the parasite. However, they are structurally more vulnerable to the financial consequences of infestation, treatment costs, animal mortality, movement restrictions, and delayed relief. Texas has the largest number of Black agricultural producers in the nation, and a substantial share of Black-operated farms specialize in cattle production (USDA NASS, 2024). Many of these operations are smaller, more capital-constrained, and more dependent on limited operating margins. As a result, the same per animal cost that a large ranch may treat as a difficult but manageable expense can threaten the continuity of a smaller producer's herd, income, and household wealth. Heirs' property arrangements intensify these vulnerabilities and long-standing barriers to credit, documentation, and disaster assistance, which have historically limited Black producers' access to the institutional support needed during agricultural emergencies (NAACP Legal Defense and Educational Fund, 2026; Farm Aid, 2022).

The consumer side of the outbreak is equally important. A screwworm outbreak does not make beef unsafe, but it can reduce supply, disrupt cattle movement, raise production costs, and place additional pressure on retail prices. This matter because beef prices were already elevated before the outbreak scenario considered in this study, while food insecurity remained sharply unequal across racial and regional lines (USDA ERS, 2026). Black households, particularly those with lower incomes and limited food budgets, would experience higher beef prices not as an abstract market adjustment but as a concrete reduction in purchasing power. Prior research on food demand and household welfare shows that price increases can force vulnerable households to reduce consumption, substitute cheaper foods, or shift money away from other necessities (Osho & Nazemzadeh, 2005; Amadi & Osho, 2025).

This study concludes that containment and equity must be treated as complementary goals. Surveillance must reach small and limited resource producers. Cost share programs must recognize differences in herd size, liquidity, and recovery capacity. Disaster relief must be accessible to producers with heirs' property and other documentation challenges. Nutrition planning must also be integrated into agricultural emergency response so that low-income households are not treated as an afterthought once market prices rise. In this sense, equity is not an optional addition to outbreak control. It is part of sound economic policy. A fair and effective response to the New World screwworm must protect animals, producers, consumers, and communities together. Only then can Texas contain the biological threat while also reducing the unequal economic harm that such a shock can produce.

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