

1 DRAFT TEXT 8/29/2025

## 2 ISAC FOOD SECURITY SUBCOMMITTEE RECOMMENDATIONS

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4 DRAFT TITLE:

### 5 6 INTRODUCTION:

7 Everyone living in the US should have access to affordable, safe, and nutritious food. This is  
8 known as food security. Invasive animals, plants, insects, and pathogens reduce US food security  
9 as they damage and destroy crops, farmland, livestock, fisheries, aquaculture, hunting, fishing  
10 and subsistence foods. ISAC members are subject matter experts in invasive pests, diseases,  
11 animals, and plants – with specialties ranging from research to regulation to direct management-  
12 and this document provides NISC agencies with ISAC’s recommendations on where US food  
13 security can be most effectively protected from the significant impacts of these pests.

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15 ISAC recommendations below focus on where federal investment yields the highest return  
16 towards ensuring US food security. As stated in the recent USDA National Farm Security Action  
17 Plan, “Farm Security is National Security,” and the food and agriculture sector is critical  
18 infrastructure. Maintaining and re-energizing federal leadership in invasive species prevention  
19 will enhance agricultural supply chain resilience and improve food security, lead to safer and  
20 sustainable farms, ranches, rangelands and forests, and affordable prices for consumers. As with  
21 human health and military threats, proactive investments in prevention, supply chain resilience,  
22 and actionable research are more productive than reactive approaches once an invasive species  
23 has established, spread, and is causing ongoing problems. With invasive species, the difference  
24 between prevention and management costs can be orders of magnitude. In some cases,  
25 prevention is the only practical means of mitigating impacts, as long-term management is  
26 prohibitively expensive (*editor’s note: could swap for “not feasible at scale”*), and once  
27 established, the presence of some invasive species can be irreversible.

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29 ISAC’s recommendations to protect food security for the US fall into four broad stages of the  
30 process of invasion prevention and mitigation. While all federal agencies on NISC have a role to  
31 play, ISAC’s recommendations are most directly relevant to the following agencies; DHS, DOD,  
32 DOC/NOAA, DOI, EPA, HHS, and USDA. These are outlined below.

### 33 34 1) PRE-BORDER PREVENTION AND HORIZON SCANNING

35 UNKNOWN UNKNOWN: Invasive species threatening US food security can be well-known  
36 pests, pathogens and weeds, but can also be species not yet documented to science: these are  
37 sometimes called the “unknown unknowns”. New trade partnerships and increased tourism can  
38 introduce new unknown pests via both well understood, and previously undocumented,  
39 pathways. ISAC recommends the following actions to improve agencies’ prevention readiness:

- ***Maintain and increase horizon scanning*** Proactively screen for invasive threats overseas via USDA's Animal and Plant Health Inspection Service (APHIS) pest risk assessment, US Fish and Wildlife Service's (USFWS) listing of animals potentially injurious to agriculture and DHS One Health Threat Detection and Risk Assessment Platform.
- ***Continue participation in international pathogen and pest monitoring organizations***, including the World Organization of Animal Health and the International Plant Protection Convention.
- ***Assess pest threats and emerging pathways from new supply chains and new export and tourism areas***, given ongoing changes of trade and foreign relationships.

PRE-BORDER DEPLOYMENT: Many high-priority species already have prevention programs in place, and thus additional incursions are best prevented by continued deployment of inspectors or HACCP plans at points of origin. The current resurgence of New-world screwworm at the southern border – a devastating pest of livestock which has been held at bay by decades of cooperation with international partners – is a reminder that keeping pests and pathogens out of the U.S. requires sustained and focused engagement of agencies beyond the national border.

- ***USDA should maintain continuity in prevention-based staffing and capacity.*** The focus on overseas production areas, ports, and packing houses to monitor quarantine compliance (i.e., fruit, vegetables, and flowers in Mexico, Central and South America, the Caribbean and Pacific) is strategically and scientifically sound and should continue.
- ***Expand USDA presence in emerging trade partner countries*** Prioritize Southeast Asia and Central American countries/regions petitioning for export privileges to the US.

IMPORTED CROP SECURITY: The US food market depends on many commodities that are not sufficiently or possible to grow in the U.S., such as coffee, bananas, avocados, and palm oil. Safeguarding imported food crops not only contributes to US food security, but also benefits US national security, as failure of crops in supply countries may lead to unrest, crime, migration, increased US food prices, and collapse of US food industries reliant on imports.

- ***Maintain involvement in, and enforcement of, international trade safety agreements and standards*** These include requirements such as acceptable treatments of wood packaging material (ISPM 15) and International Movement of Seed (ISPM 54).
- ***Maintain and enhance capacity for APHIS to complete the process of declaring the US free of emerging foreign pests and diseases.*** This is a first step to requiring importing nations to carry health certificates certifying their commodities are free of pests- thus protecting US domestic agriculture.
- ***Continue to support USDA APHIS leadership in North American Plant Protection Organization development of alternatives to replace methyl bromide.*** This chemical is being phased out internationally, but shippers have no viable alternative for some commodity and cargo treatment needs.

HITCHHIKERS: Invasive animals, insects, seeds, and microbes are often not the intended commodity and are instead infesting or contaminating the commodity or its conveyance. These

“hitchhikers” are often contained in or on traded live plants, fruit, wood products, woodpackaging and shipping containers, or they can be parasites or incidentally associated with traded animals (e.g. livestock and pets.)

- ***APHIS and FWS interceptions of infesting and contaminating invasive species have seen improved attention over time, but this pathway needs continued and increased support.***
- *Data on hitchhiker interceptions need to be systematically recorded in trade databases, and including preventative risk assessments, to enable focus on emerging pathways, products, or source countries.*

## 2) PORT AND BORDER SECURITY

Invasive species arrive to our borders in cargo, conveyances, and via passenger travel. They often escape detection due to the increasing trade volume and complexity, combined with agency staffing shortages. To prevent the spread of invasive species onto US farms, ranches, orchards and rangelands, fisheries, federal agencies and their staff need the authority and capacity to strategically inspect imported cargo and consistently enforce compliance. ISAC recommends the following actions to agencies involved with border biosecurity, particularly the US Customs and Border Protection, U.S. Fish and Wildlife Service and the Animal and Plant Health Inspection Service, and others.

- ***Increase staffing and screening technologies in facilities that handle cargo.***
- ***Increasing staff training requirements and support.***
- ***Improve data gathering, analyses, sharing, training and protocols*** (e.g. update the Agricultural Risk Management database, ARM, audit and improve the DOI Law Enforcement Management System, LEMIS) to generate datasets for agency analysts and AI models to assist with data analyses and recommendations.
- ***Update data sharing mechanisms and agreements*** (e.g. MOU needed between USFWS and CBP) including the complete adoption of an “all of government” single use platform (e.g. International Trade Data System, ITDS).
- ***Invest in technology and best in class science*** (e.g. genetic and molecular analysis, eDNA, training data for AI tools, enhanced identifier corps and tools for remote identifications of intercepted pests).
- Expand the visibility, participation, and communication of cross-agency Pest Risk Committees at ports of entry to integrate and cross-train federal agency staff with US State agency staff on state-based invasive species concerns.
- ***Increase and improve outreach to trade and private entities*** to support “good actors” and tincrease enforcement on “bad actors”.

Cargo and conveyances may contain potentially invasive species not covered by existing laws (Lacey Act, Plant Protection Act). As a result, agencies have little ability to hold, manage, or return the contaminated shipment. We recommend closing the taxonomic gaps in agency scope to protect US food supply and farms:

- Amend the Lacey Act by adding invertebrates to the fish and wildlife definition (§3371(a)), and expand the labeling provision (§3372(b)).
- Grant regulated status for non-native organisms that are not directly agricultural pests, but are destructive to agricultural land, water, or infrastructure (e.g. snails, nematodes, mussels, earthworms, water weeds, ants, etc.).
- Close the gap in DOI oversight of confiscated or temporarily held live animal imports (currently placed into facilities without assessment of risk to food security or animal health).

Unmanaged passenger travel can introduce plant and fruit pests, such as fruit flies, into food production areas, at highly damaging rates.

- DHS CBP should increase both passenger inspections and direct engagement of passengers to increase awareness of invasive pests and their association with fresh plant material, fruit, food, and animals. A return to the mandatory requirement for paper CBP form for all passengers could serve as an effective delivery mechanism for behavior-changing outreach.

International mail and e-commerce are an ever-increasing source of invasive species- especially invasive plants in the seed trade, and invertebrates and small vertebrates in the live plant and pet trades. ISAC recommends federal agencies:

- Reform the *de minimus* rule and increase enforcement for imports to address the rise of complexity of incoming mail (DHS CBP).
- Invest in data gathering and advanced analysis of invasive species in e-commerce.
- Work directly with direct-to-consumer companies (e.g. Etsy, Amazon) on detection of smuggling and fraudulent shipping, and use AI to assist with predictive targeting.
- Require direct-to-consumer companies to meet legal standards of being a broker, carrier, or legal responsible entity for all shipments.

### 3) EARLY DETECTION AND RAPID RESPONSE

The importance of the safeguarding continuum related to the US food system is underscored by the critical work currently being done by NISC agencies. ISAC made detailed recommendations in several recent publications (<https://www.doi.gov/sites/default/files/documents/2025-01/isac-recommendations-edrr-2025-508.pdf> <https://www.doi.gov/sites/default/files/documents/2024-06/isac-recommendations-edrr-2024-0612-508.pdf>; <https://www.doi.gov/sites/default/files/documents/2024-02/isac-national-priorities-white-paper-november-2023.pdf> . It is essential that NISC member agencies continue to review and implement those recommendations particularly those related to food security.

The National Priorities of the Invasive Species Advisory Committee (ISAC) for 2022-2024 emphasized the priority of Early Detection and Rapid Response (EDRR), highlighting the importance of timely actions to detect and eradicate invasive species through a nationally coordinated EDRR program. In May 2024, ISAC provided specific guidance on developing and

implementing a National Early Detection and Rapid Response (EDRR) Framework. These recommendations, particularly those related to the USDA, are crucial in the context of food security.

Elements of the May 2024 and October 2024 ISAC papers underscore the need for coordination. Enhancing and providing consistent support for established plans, frameworks, and programs is necessary across the USDA, DOI, and OneHealth Coordination Unit to support US food security and food systems.

#### 4) IMPACT REDUCTION OF ESTABLISHED INVASIVE SPECIES

Once an invasive species is widely established it is often impossible to eradicate. Thus, the focus shifts to containment and management to mitigate negative impacts. Investment in impact mitigation has proven successful with a high return on investment. For example, after the discovery of the agricultural parasite witchweed in the Carolinas, a large scale coordinated effort was launched to protect America's grass crops. ISAC recommends the following actions to improve agencies' impact reduction capacity:

- **Improve communication, outreach, and education** for existing programs (e.g., "Don't Pack a Pest") and develop new campaigns, while emphasizing success stories. Collaborate with US Land Grant Extension systems that have long standing extension programs and are embedded and trusted in local communities.

CONTAINMENT: Even invasive species that have been in the US for decades may not have fully spread to all available habitat. Preventing further spread can be more cost-effective than deregulation (e.g., the spongy moth "Slow the Spread" program).

- **NISC should continue coordination among federal agencies, in partnership with state and tribal land managers**, to prevent the further spread of established invasive species.
- **Continue coordination of geographic distribution databases** of invasive species in centralized databases (e.g., BISON, [Nonindigenous Aquatic Species](#)).

MANAGEMENT: While eradication may not be feasible for most established invasive species, an important tool for mitigating their impacts is to reduce population sizes to less damaging levels, and biological control is potentially an effective tool for suppressing pest populations over large areas. Mitigating invasive species impacts will almost always require long term management efforts to protect US agriculture. For example, screw worm, boll weevil, and fruit fly campaigns have been successfully ongoing for decades.

- **Make management and monitoring data available online** for agency and academic analysts, automated data aggregators, and AI models, in order to track successful management practices and the geographic extent of invasive species.

- **Maintain and increase investment in biological control programs** which remain one of the most cost-effective efficient tools for long-term management of widespread invasive species.
- **Encourage new tools and technologies** for detection and control (e.g., support efforts and institutions that generate data to train AI models towards accuracy)
- **Designate a lead agency for coordinated federal, state, tribal and territorial management of established nuisance invasive species** (e.g., the [Aquatic Nuisance Species Task Force](#)).

CONCLUSION: ISAC acknowledges and appreciates the existing and ongoing work that federal agencies are doing to prevent and mitigate the impacts of invasive species. The recommendations provided here are to complement these efforts to further strengthen US food security, which is key to national security.