Reinforcing Biosecurity in Mexico due to the threat of African Swine Fever

Focusing on how to control potential spread in wild pigs
Description of the pork producing sector in Mexico

Thanks to investment projects geared towards modernizing the swine industry, with particular attention to animal health, the sector has seen an increase in productivity and profitability.
Mexico’s share of the world’s pork meat production

Main pork producing countries, 2015 – 2017
(Millions of metric tonnes, carcass equivalent)

Mexico produces 1.4% of the world’s pork meat and is in ninth place amongst pork producing countries, producing 1.45 million metric tonnes. (FIRA 2017)
Pork meat production at country level

80% of the production in the States of: Guanajuato, Jalisco, Michoacán, Puebla, Veracruz, Sonora y Yucatán.
85% of pork derived from commercial and semi-commercial farms.
Backyard holdings are predominantly found in small communities and around metropolitan areas. These operations generally contain animals of native breeds in rustic facilities with basic nutrition and lower production parameters and where mortalities may reach 50% of the litter.
Risk Factors

Importation

• Live pigs
• Pork meat and pork meat products
• Animal feed prepared with pork ingredients
• Veterinary biologics
• Hunting trophies
Prevention and mitigation of the risk of introduction of the ASF virus

Improvements to inspection in ports, airports and other borders

Nationally applied inspection systems
Trained and dedicated staff
Inspections aided by detector dogs

Animal Health Inspection Offices: 56
- Maritime ports: 15
- Airports: 23
- Land borders: 18
- Secondary offices (support): 48
- Verification and Federal Inspection points (PVIF): 45

Northern Border: 3,420 km
13 million inhabitants

Southern Border: 1,149 km
1.5 million inhabitants
Measures implemented in entry points into the national territory

• Shoe disinfection from crew and passengers arriving from international flights and ships.

• Luggage inspection for crew and passengers arriving at entry points into the national territory.

• Prohibition of disposal of organic waste representing a sanitary risk, derived from flights originating or proceeding from countries where ASF is present.

• Prohibition of disposal of organic waste representing a sanitary risk and sealing of maritime containers in ports.
Laboratory network of BSL2 and BSL3

Tecamá, Mex, mobile unit specializing in molecular biology N2
Distribution of wild pigs (Sus scrofa) in Mexico

Source: CONABIO, 2018
State reports of presence of wild pigs

- **Chihuahua**
  - Source: SEMARNAT

- **Nuevo León**
  - Source: Parques y Vida Silvestre de Nuevo León (PVSNL)

- **Coahuila**
  - Source: SEMARNAT

- **Durango**
  - Reserva de la Biosfera “La Michilia”
  - Source: SEMARNAT-CONANP

- **Campeche**
  - Laguna de Términos
  - Source: CP, Puebla

- **Baja California Sur**
  - Source: FMVZ, UNAM

- **Tamaulipas**
  - Source: Comisión Estatal de Vida Silvestre
Risk interface between domestic and wild pigs

- Wild pigs
- Backyard pigs
- Commercial operations

Direct contact: 
Indirect contact: 

**Wild pigs**

**Backyard pigs**

**Commercial operations**
## Model to identify and characterize wild pig populations

<table>
<thead>
<tr>
<th>Actions</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field verification of reports of presence (distribution, numbers and population trends)</td>
<td>Videocameras, excretions, concentration areas, digging areas, capture-recapture, distances, transects, hunting registration and information</td>
</tr>
</tbody>
</table>
# Model to control populations of wild pigs

<table>
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<tbody>
<tr>
<td><strong>Control not lethal</strong></td>
<td><strong>Exclusion fences</strong>&lt;br&gt;<strong>Biosecurity of livestock facilities</strong>&lt;br&gt;<strong>Chemical birth control</strong></td>
</tr>
<tr>
<td><strong>Lethal control</strong></td>
<td><strong>Traps – cages and ropes</strong>&lt;br&gt;<strong>Hunting</strong></td>
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Promoting the implementation of biosecurity measures

STOP
No entry
Restricted area for sanitary control