

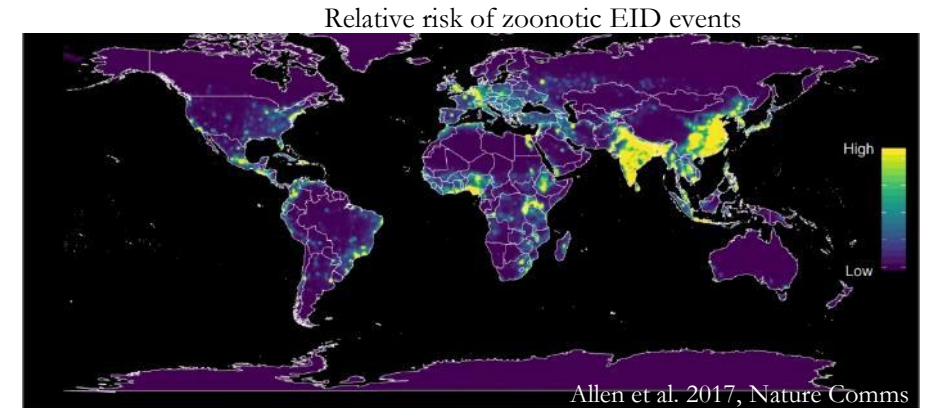
Preventing Pandemics – African Swine Fever and its cascading impacts in Asia

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ASEAN African Swine Fever Workshop
2 May 2023

Three interrelated nature-based crises

- Biodiversity loss
- Climate change
- Pandemics



Rapid spread of ASF to >50 countries



Pig farming



Intensity of trade



Human density



Pork consumption

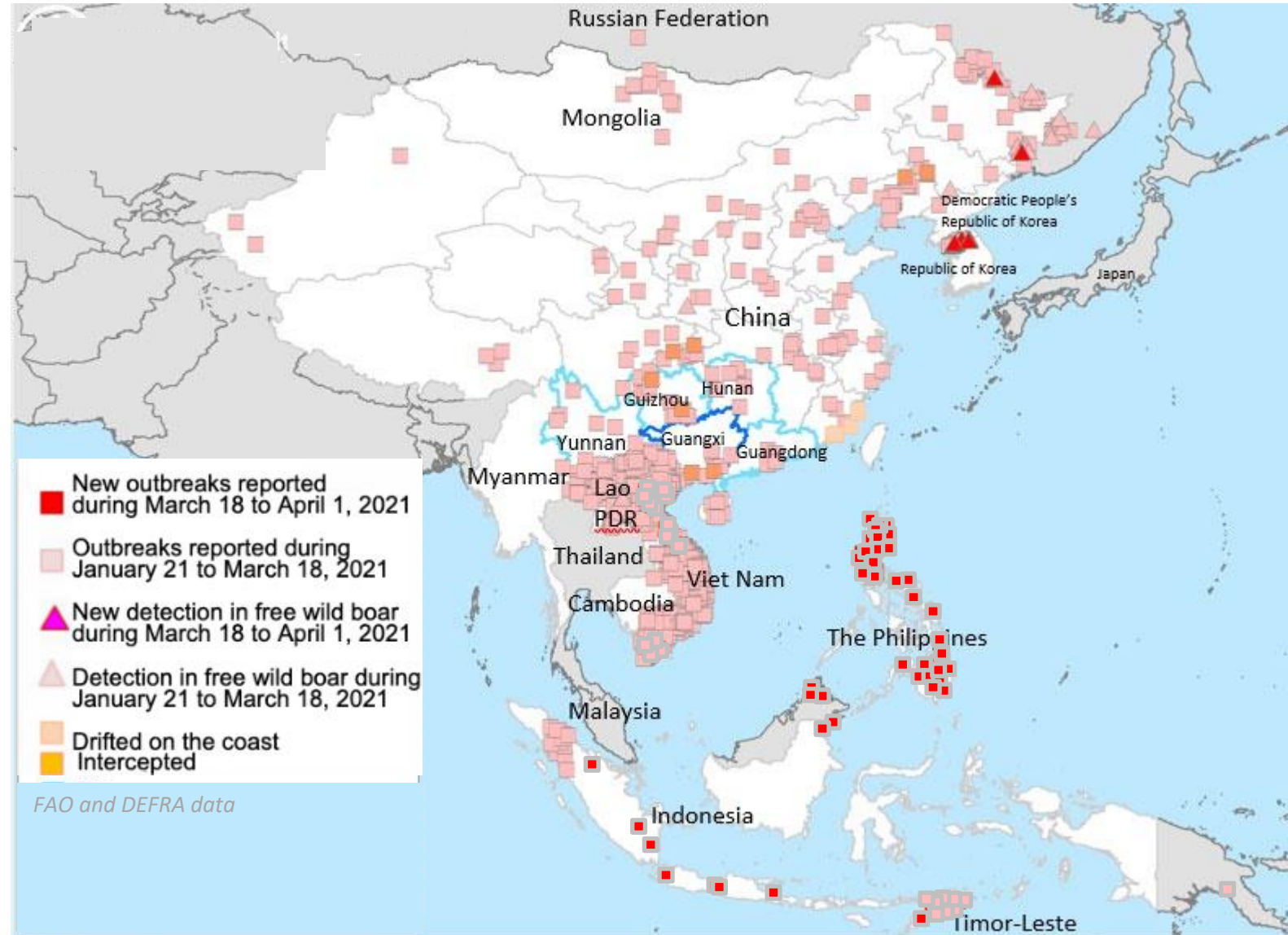


Conservation status



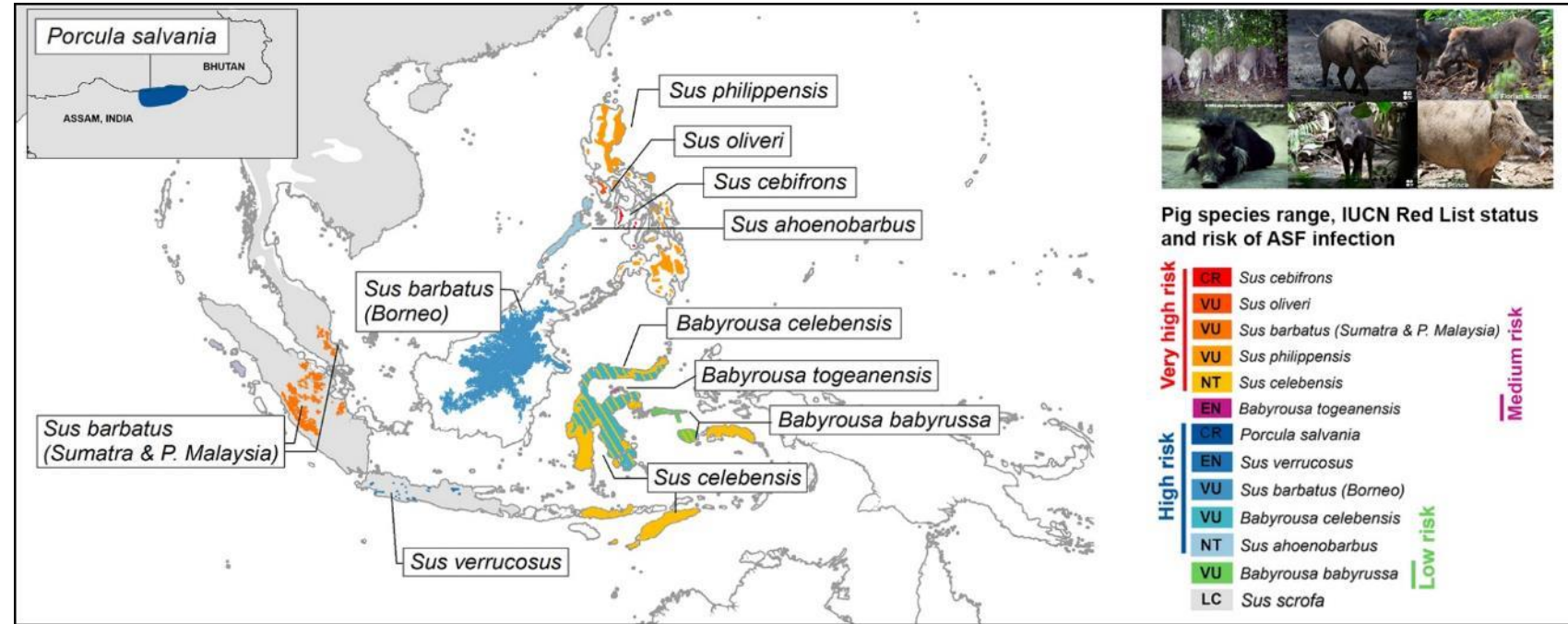
Presence of sympatry

(Sus scrofa)



11 Asian wild pig species at high risk of ASF

-  Pig farming
-  Intensity of trade
-  Human density
-  Pork consumption
-  Conservation status
-  Presence of sympatry (*Sus scrofa*)



Modified from Luskin et al. 2020, Con. Lett.



Cascading impacts on predators and plants

- Impact on forest structure and plant communities
- Reduced principal prey for threatened top predators
- Increased human-carnivore conflicts
- Impact on rural communities



Sumatran tiger
© M.Linkie



Komodo dragon
© Sheherazade



Javan leopard
© Anaxibia/Wikipedia



Kerinci Seblat National Park, Sumatra
28 August 2021



Joint Communique



Conservation impacts of African swine fever in the Asia-Pacific region
Joint communique of the Food and Agriculture Organization of the United Nations (FAO),
International Union for Conservation of Nature Species Survival Commission (IUCN SSC)
and the World Organisation for Animal Health (OIE)
24 June 2021

Three key recommendations,

- **Increased dialogue** between government ministries with responsibility for ASF and relevant experts to develop government policies that mitigate the impacts of the disease on wildlife, livestock health and rural livelihoods.
- **Stronger biosecurity, surveillance, monitoring and response systems** across all sectors, inclusive of all domestic and wild animal species.
- **Collaborations** between key sectors and government ministries and urge them to agree on policies that integrate responsibilities on ASF control.



Lessons learned from Asia

- **Preventing Pandemics** at source is key
- Raising awareness
- Multi-disciplinary collaborations
- Increased and novel surveillances
- One Health approach – policies and plans

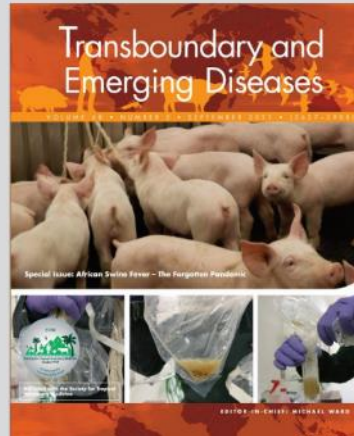


Multi-disciplinary collaborations

WILEY

African Swine Fever:
The Forgotten Pandemic

Latest Special Issue
from *Transboundary and
Emerging Diseases*



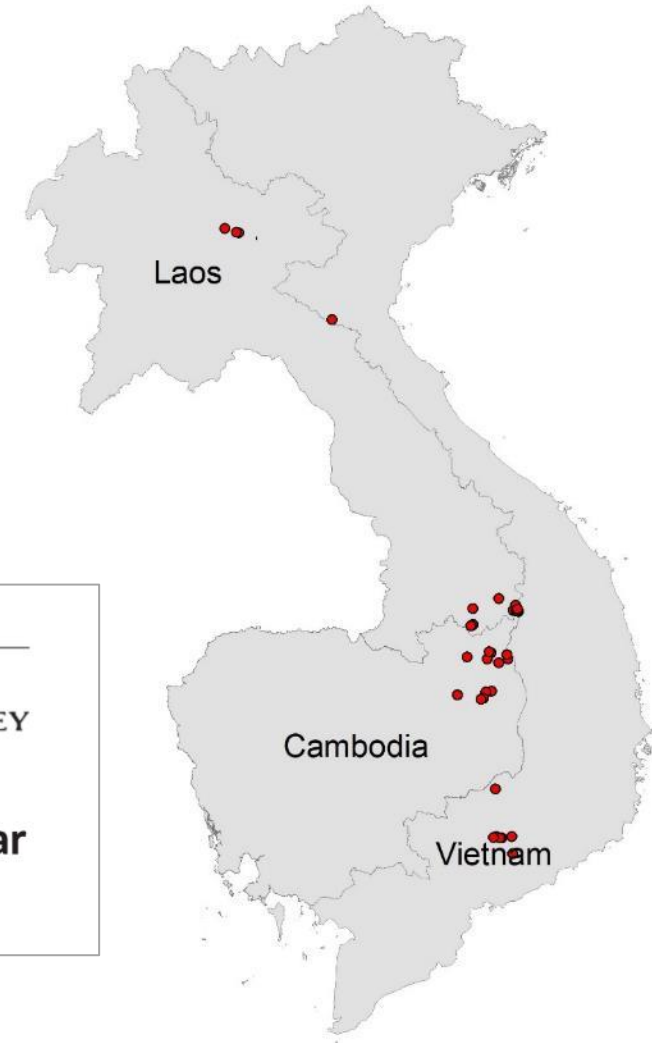
Received: 30 September 2020 | Revised: 6 December 2020 | Accepted: 18 December 2020

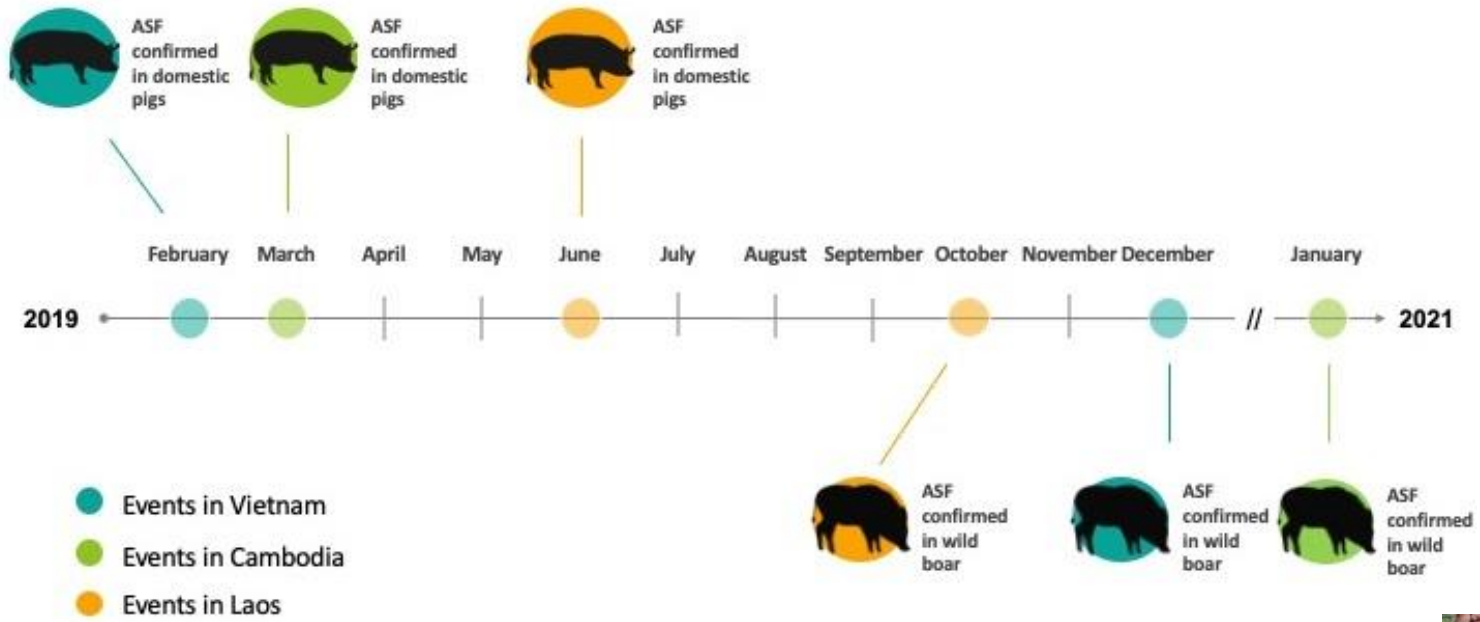
DOI: 10.1111/tbed.13964

SPECIAL ISSUE ARTICLE

Transboundary and Emerging Diseases WILEY

**Detection of African swine fever virus in free-ranging wild boar
in Southeast Asia**



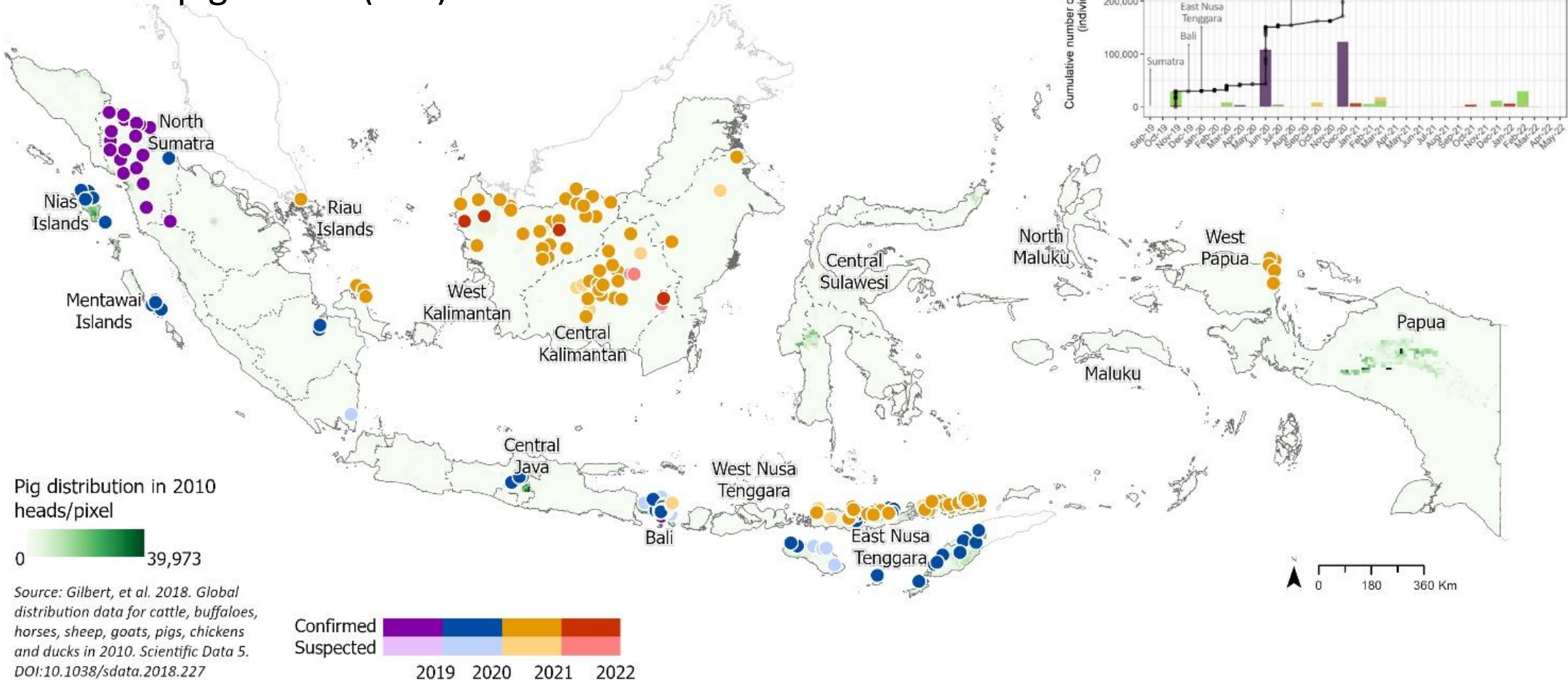


Multi-disciplinary collaborations



Surveillance using non-traditional data

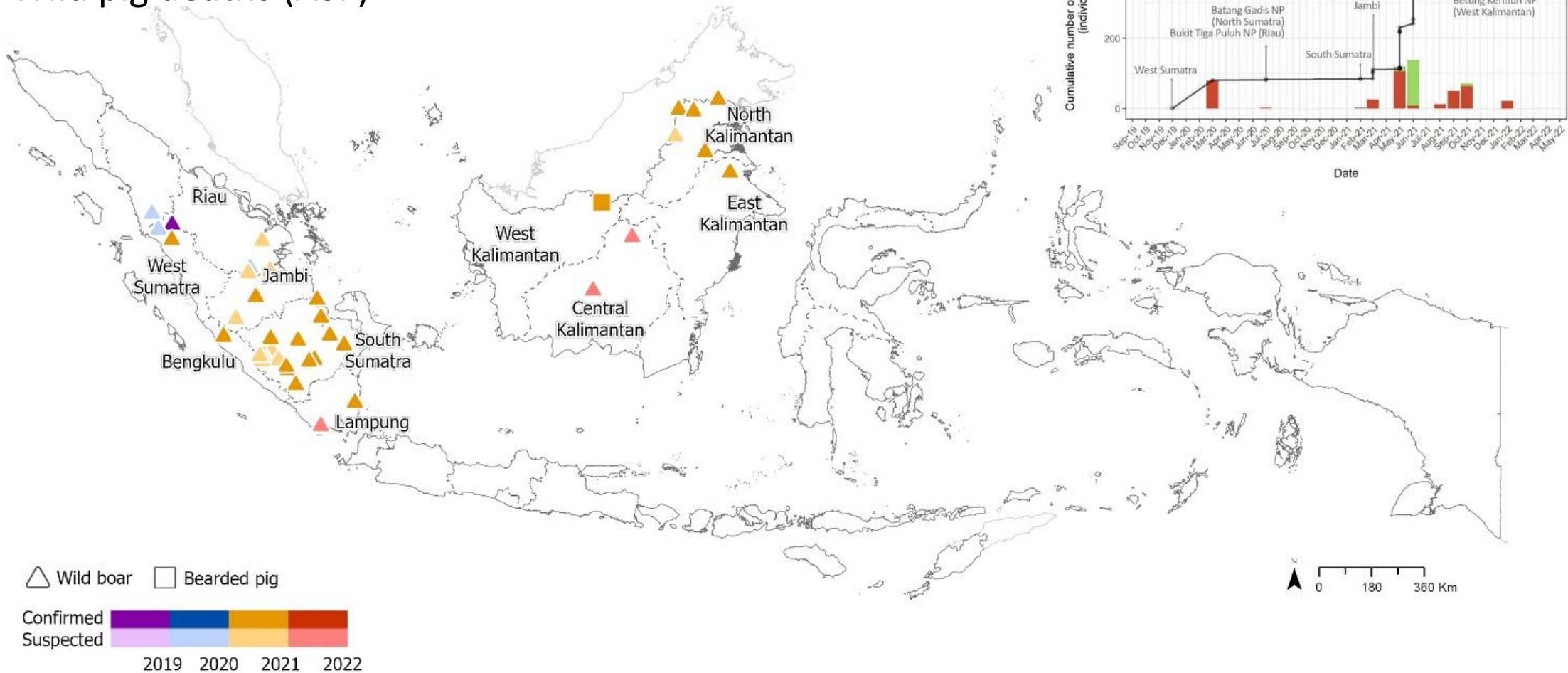
Domestic pig deaths (ASF)



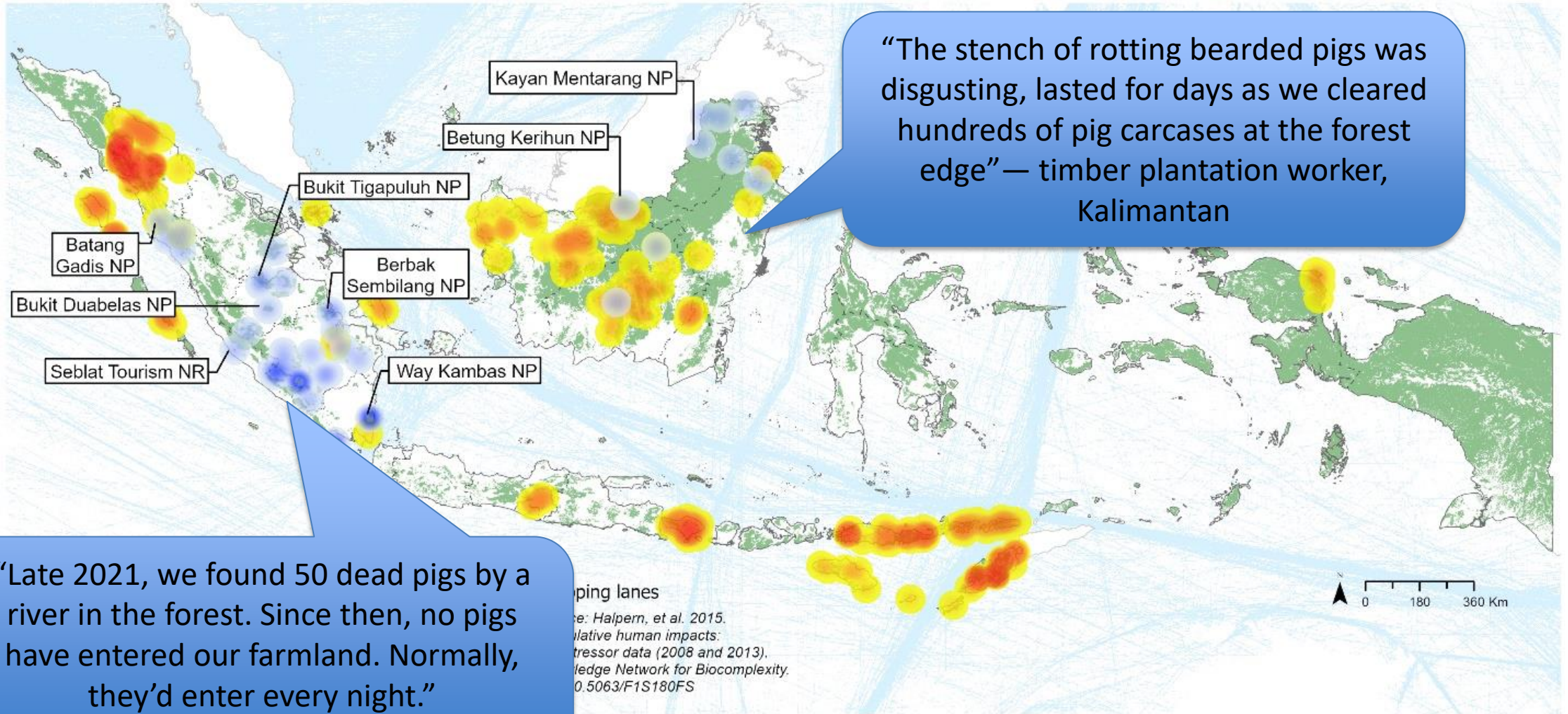
Source: Gilbert, et al. 2018. Global distribution data for cattle, buffaloes, horses, sheep, goats, pigs, chickens and ducks in 2010. Scientific Data 5. DOI:10.1038/sdata.2018.227

Surveillance using non-traditional data

Wild pig deaths (ASF)



Surveillance using non-traditional data



“The stench of rotting bearded pigs was disgusting, lasted for days as we cleared hundreds of pig carcasses at the forest edge” — timber plantation worker, Kalimantan

“Late 2021, we found 50 dead pigs by a river in the forest. Since then, no pigs have entered our farmland. Normally, they’d enter every night.”
— smallholder farmer, Sumatra

One Health approach

- Trans-sector and -boundary data sharing to recognise the importance of preventing, monitoring and controlling ASF
- Support national wildlife conservation, domestic animal and health agencies through best practice approaches to monitor, prevent and control ASF → develop science-based management plans that mitigate ASF's impacts



Key questions facing Asia

- Is ASF now endemic in Asia?
- Need to reassess Red List status of Asia's wild pigs?
- Concern about other species?
- Knock-on effects?
- Preparedness – ASF and/or another infectious disease
- *Cause for optimism: we are finding signs of wild pigs in the forest again!*



We Stand for Wildlife™

