

2-10 Other Surveillance

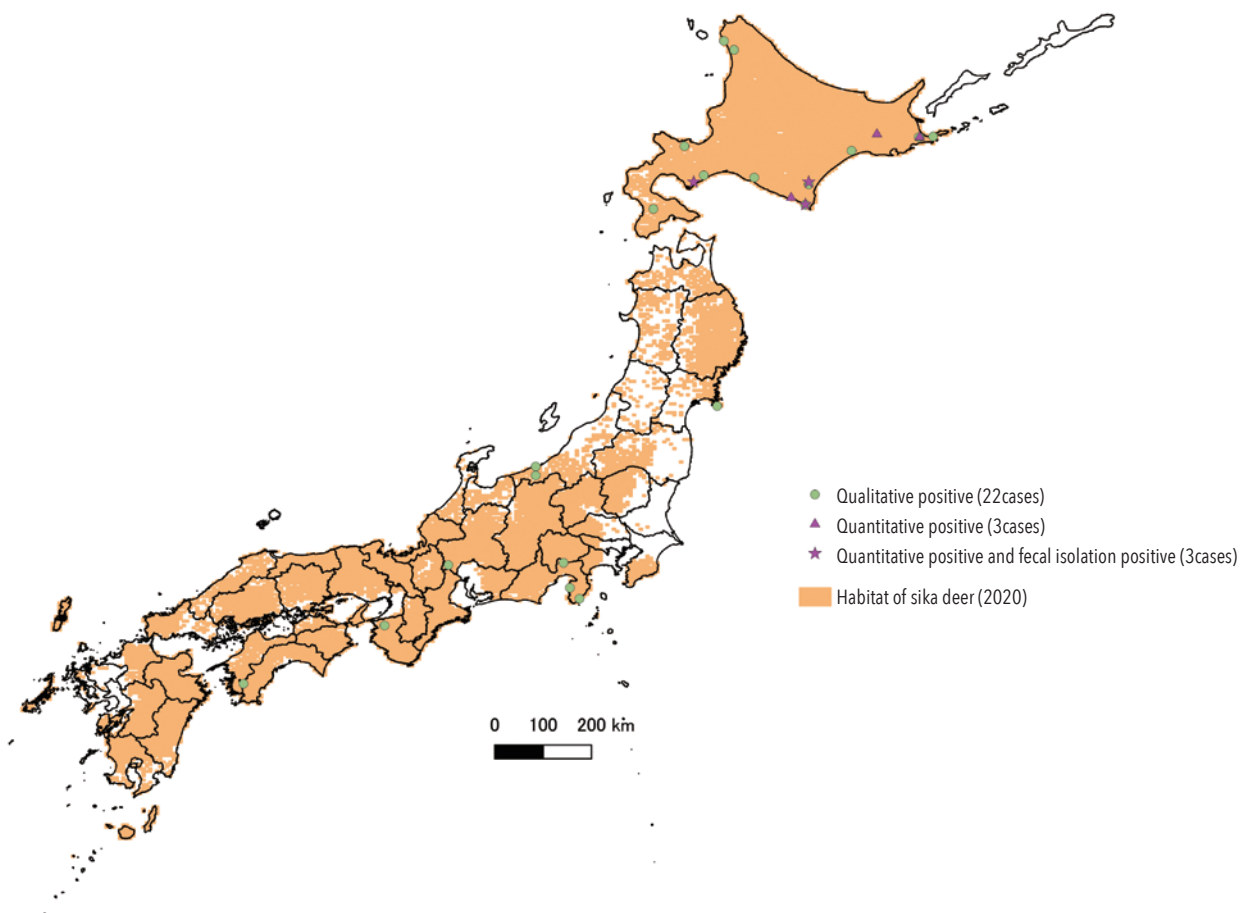
Wildlife Surveillance

Wild animals have been considered one of the sources of infection for livestock. Even for the disease eradicated among livestock, the disease may be maintained among wild animals. For this reason, it is necessary to study the status of animal infectious diseases in wild animal population. MAFF is conducting surveillance in wild animal species for the infectious diseases relevant in livestock sector.

(1) Johne's disease surveillance targeting wild sika deer

From FY 2016 to FY 2021, 1,531 fecal matter samples of wild sika deer were tested for Johne's disease, and 6 samples were determined to be quantitative positive (i.e. *MAP* genes detected above the reference value) by PCR testing, while 22 samples were qualitative positive (i.e. *MAP* genes detected but low concentration). Of the samples that tested positive in the quantitative test, 3 were also confirmed positive in fecal culture.

Fig. 2-10-1 Johne's disease surveillance in wild sika deer (FY2016-2020)



(Note: Habitat of sika deer is based on data published by the Ministry of the Environment (<https://www.env.go.jp/press/109239.html>)).

(2) Ibaraki disease surveillance targeting wild sika deer

From FY2017 to FY2021, 904 serum samples of wild sika deer were tested for Ibaraki disease, with 16 positive in FY2017, 2 in FY2019, and 5 in FY2020.

(3) Chronic Wasting Disease (CWD) test for wild sika deer

Of the samples collected in FY2021, 100 samples (medulla oblongata) were tested for CWD and all tested negative.

(4) Aujeszky's disease surveillance targeting wild boars

Aujeszky's disease is a swine disease designated as a Notifiable infectious disease. Major clinical signs are abortions in pregnant sows, neurological symptoms and high mortality in young piglets. Japan has been pursuing eradication based on disease control guide-

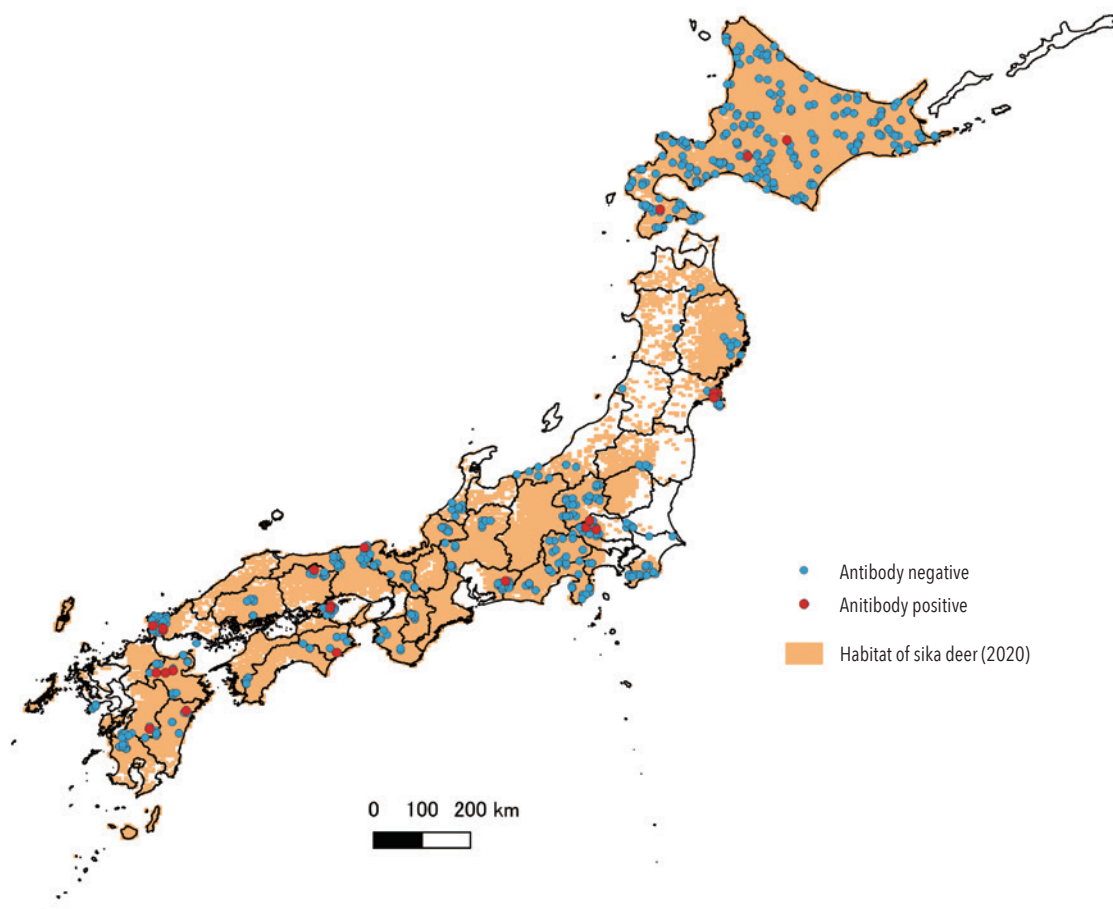
lines, and as a result, no outbreaks have been reported in domestic pigs since 2017. With regard to wild boars, testing was conducted mainly in areas where positive results were confirmed in previous surveillance, and 11 samples were confirmed antibody positive in FY2018 and 5 samples in FY2019. In FY2020, samples were collected in the areas where no antibodies have been detected before, and the result was all negative. Tests are ongoing as of the end of FY2021.

More information on wildlife surveillance can be found at;

https://www.maff.go.jp/j/syouan/douei/katiku_yobo/wildlife_surveillance.html

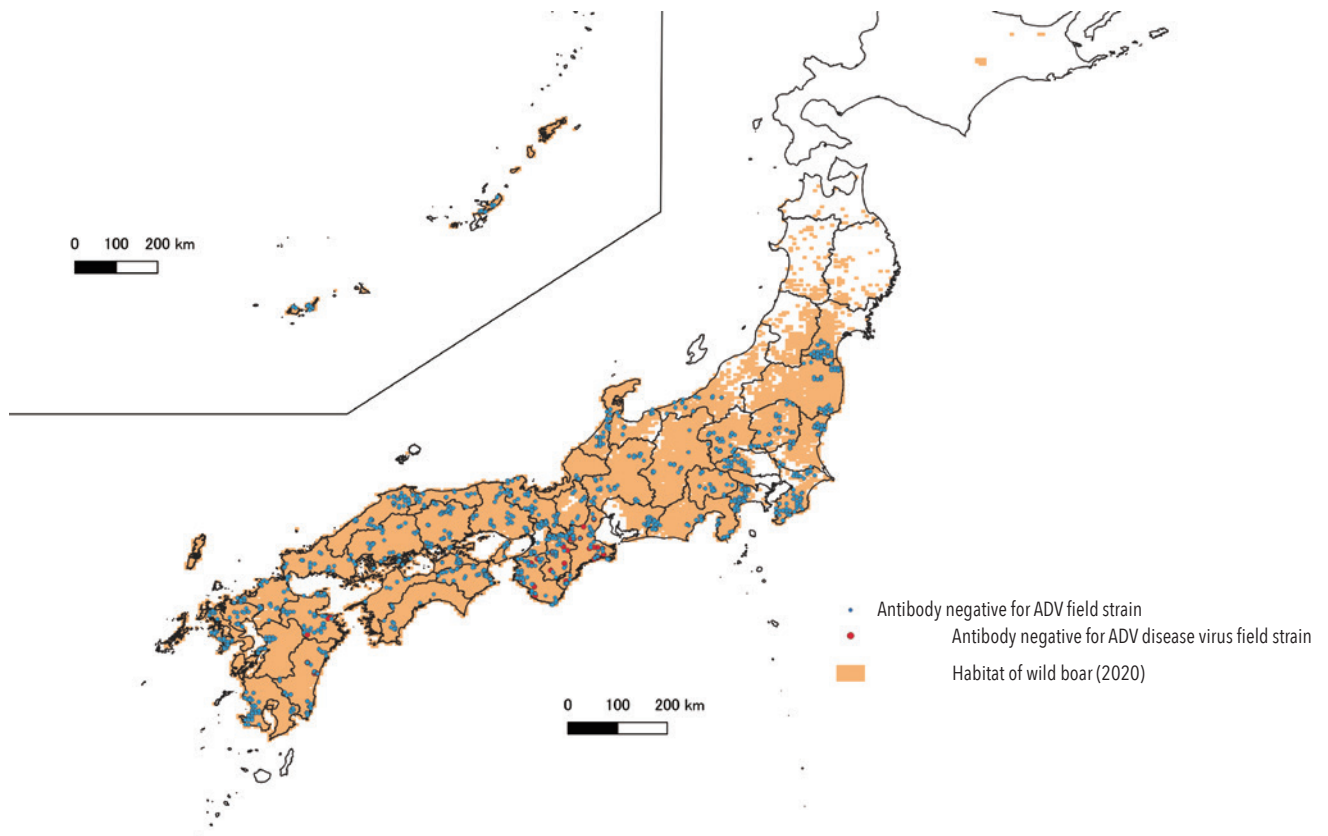


Fig. 2-10-2 Ibaraki disease surveillance in wild deer (FY 2017-2021)



(Note: Habitat of sika deer is based on data published by the Ministry of the Environment (<https://www.env.go.jp/press/109239.html>)).

Fig. 2-10-3 Aujeszky's disease surveillance in wild boars (FY 2018-2020)



(Note: Habitat of wild boar is based on data published by the Ministry of the Environment (<https://www.env.go.jp/press/109239.html>). Although the map indicates wild boar habitat includes Hokkaido, according to Hokkaido, they are originated from captive boar-pig hybrid and no wild boars in their natural state have been confirmed in Hokkaido.

