

보도시점 2025. 4. 8.(화) 12:00 (수요일 조간) 배포 2025. 4. 7.(월)

Preventing Animal Road Accidents with Image Recognition AI Technology

- Detects animal presence ahead in real time using CCTV and LiDAR sensors, and displays alerts on an electronic signboard
- System installed in two locations (Yangpyeong and Pyeongchang) and pilot operation begins on April 9

The Ministry of Environment (Minister Kim Wansup) announced that it will begin a pilot operation on April 9 by installing the ‘Animal Road Accident (Roadkill) Prevention System’ using image recognition artificial intelligence (AI) technology on two national highways (in Yangpyeong County, Gyeonggi Province, and Pyeongchang County, Gangwon Province).

The Animal Road Accident Prevention System uses artificial intelligence-based CCTV and LiDAR sensors to detect the presence of animals and displays the message "Wild animal detected within 150m ahead" in real-time on an LED display board installed 150 meters in front.

In addition, the AI technology of the system learns (through deep learning) accumulated data such as the type of wild animal and the time of appearance, and uses the predicted information to alert about potential animal appearances in advance.

Through this, drivers can recognize the presence of animals ahead, reduce their speed, and pay closer attention, thereby preventing accidents.

This Animal Road Accident Prevention System was installed in March 2025

after the Ministry of Environment, POSCO DX, Korea National Park Service (KNPS), and National Institute of Ecology (NIE) signed a memorandum of understanding (MOU) in July 2024 for the system's implementation. Following the agreement, one road each in Yangpyeong County and Pyeongchang County, which are areas with frequent animal road accidents, was selected for installation.

The Ministry of Environment oversaw the project and provided administrative support, while POSCO DX was responsible for system development and installation. The KNPS and the NIE provided technical support, including selecting project sites and evaluating effectiveness.

The Ministry of Environment plans to install the system at three additional road sections with frequent animal road accidents, including in Hoengseong and Namwon, by 2027, and will analyze its effectiveness.

The Ministry expects that this system will help prevent not only animal road accidents but also various risk factors such as vehicle damage and traffic accidents, thereby protecting drivers and contributing to biodiversity conservation.

Meanwhile, on April 9, the start date of the system's operation, the Ministry will hold a completion ceremony for the AI-Based Animal Road Accident Prevention System at the Welfare Center of the Cheongun Township Office in Yangpyeong County.

A total of 50 participants - including the four collaborating organizations, the Uijeongbu Land Management Office of the Seoul Regional Construction and Management Administration, Yangpyeong County Office, and local residents of Cheongun-myeon who cooperated in the system's installation - will attend the completion ceremony and observe a demonstration of the system on-site.

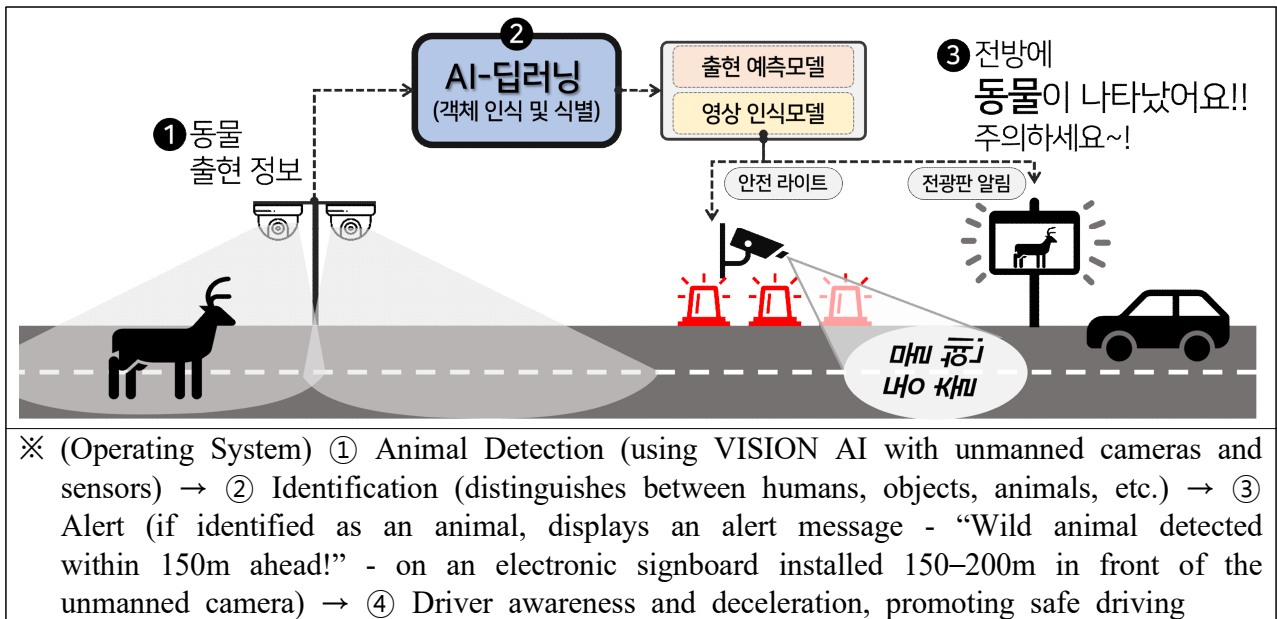
Kim Tae-oh, Director of the Nature Conservation Bureau at the Ministry of Environment, stated, “This system holds greater significance as it is one of the newly introduced measures to reduce animal road accidents and a result of public-private collaboration.” He added, “We will continue to promote various projects and policies that involve corporate participation in biodiversity conservation.”

Attachments 1. Schematic Diagram of the Animal Road Accident Reduction System
2. Completion Ceremony Event Plan. End.

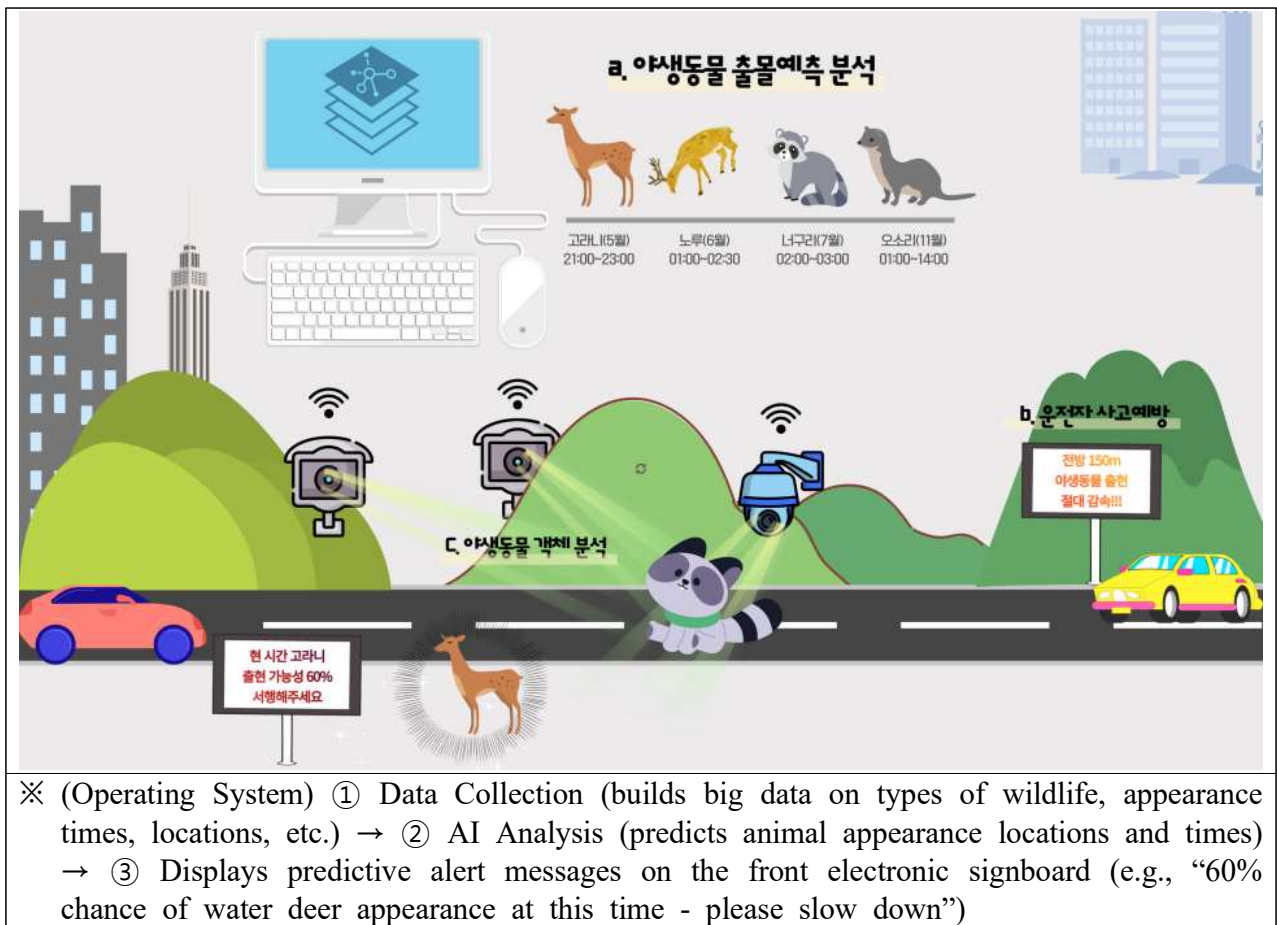
Attachment 1

Schematic Diagram of the Animal Road Accident Reduction System

- ☐ (Basic Function) Detects, identifies, and alerts animal presence through cameras.



- ☐ (Advanced Feature) Predicts Animal Appearances Through Big Data Analysis



☐ **Background**

- With the completion of the installation of the Animal Road Accident Prevention System through public-private collaboration (in Yangpyeong and Pyeongchang), the completion ceremony will be held as an opportunity to strengthen inter-agency cooperation and promote the system.

※ (July 26, 2024 Signing of Collaborative Project MOU) Ministry of Environment, POSCO DX, Korea National Park Service, National Institute of Ecology

☐ **Event Overview**

- (Date/Location) April 9, 2025 (Wednesday), 13:30 - 15:30 / 3rd Floor, Welfare Center, Cheongun Township Office, Yangpyeong County
- (Main Attendees) Approximately 50 participants, including Director of the Nature Conservation Bureau (Ministry of Environment); Head of Management Support Office (POSCO DX); Executive Director of Resource Conservation (Korea National Park Service); Director of Research and Evaluation Division (National Institute of Ecology)

※ Attendees include the Uijeongbu Land Management Office of the Seoul Regional Construction and Management Administration, Yangpyeong County officials, and village leaders.

- (Main Content) ^{Indoors} System introduction, demonstration, and ceremony
^{Outdoors} Site visit to the system installation location

☐ **Detailed Schedule (Draft)**

Schedule		Event Details	Notes
13:30~13:45	15 minutes	·Guest reception and greetings	
13:45~13:50	5 minutes	·Opening and pledge of allegiance	Hosted by POSCO DX
13:50~13:55	5 minutes	·Introduction of guests	
13:55~14:05	10 minutes	·Congratulatory remarks (Ministry of Environment, POSCO DX)	
14:05~14:25	20 minutes	·Introduction of the public-private partnership agreement, and the explanation and demonstration of the system	
14:25~14:50	25 minutes	·Commemorative ceremony (handprint stamping) and group photo	
14:50~15:00	10 minutes	·Boarding vehicles	
15:00~15:30	30 minutes	·On-site inspection of the installation location	Use of group bus transportation
15:30~	-	·Return to Welfare Center, event conclusion and dismissal	