High-Tech to protect animals receives financing

31 May 2012

The "Wildlife Finder" project (Wildretter) is convincing – so convincing that it will be financed with 2.5 million euro for 3.5 more years. The goal is to develop a system for rescuing fawns during the mowing of agricultural land. Under the leadership of ISA Industrieelektronik GmbH, the German Aerospace Center (DLR) is working with its project partners, the agricultural technology company CLAAS and Munich Technical University (TUM). This joint project is supported by the Landesjagdverband Bayern, with the project administration being handled by ZENTEC GmbH. On 31 May 2012 the grant notifications will be presented by Ilse Aigner, Federal Minister for Food, Agriculture and Consumer Protection.

"We must do everything we can to prevent accidents with wild animals. These accidents are tragic, for both animals and people. With the help of the "Wildlife Finder" project it is possible to quickly turn innovative ideas from the science lab into practical solutions out on the fields," explained Federal Minister for Food, Agriculture and Consumer Protection Aigner during the formal presentation at DLR in Oberpfaffenhofen. Technology which reliably detects and rescues wild animals is also welcomed by farmers, hunters and labor contractors, diverse groups which share an interest in animal protection. "This encourages us to continue our long-term efforts to investigate wild animal rescue and remote sensing methodologies together with our competent industrial and university partners" added Dr. Peter Haschberger, a department head at DLR's Remote Sensing Technology Institute.

Wild animals, especially fawns and young hares, are particularly at risk during early summer mowing. When danger threatens, these animals crouch down motionless in the high grass, where large numbers of them are caught by mowing machines. Precautions like driving away the animals or searching the fields by foot have not been successful enough. Clever technical solutions are called for. So far, there are no satisfactory wildlife rescue systems which can be mounted on agricultural machinery – a situation which it is hoped will change with the continuation of the project

In previous years the above-listed project partners already thoroughly investigated and tested the use of technical sensors to detect wildlife. The "Wildlife Finder" team is now ready to apply the insights gained along with new technologies to implement specific solutions. The focus of the new project is on establishing a wildlife finder system which follows the basic principle: "Find – Mark – Find again – Rescue – Safeguard".

"Finding" is accomplished before mowing begins by using a combination of sensors mounted on a portable or aerial platform: infrared radiation identifies an animal's presence in the grass because of its constant body temperature, and microwave sensors identify the water in the animal's body. Data from video cameras and distance-measuring sensors assist in the analysis. "Marking" the fawn thus found is done electronically using a so-called RFID system (Radio Frequency Identification) of the type used for automatic identification and locating tasks in the trade and transport sectors. A reader affixed to the agricultural machine detects the marking during mowing. This means that the animal can be reliably found again, safely removed from the grass, and thus rescued.

The "Wildlife Finder" project will include a study of user acceptance of the new system and an analysis of the efficiency of the widespread alternative practice of shooing away wildlife.

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"Wildlife Finder": The goal is to rescue fawns during the mowing of agricultural land

The goal is to develop a system for rescuing fawns during the mowing of agricultural land. Under the leadership of ISA Industrieelektronik GmbH, the German Aerospace Center DLR is working with its project partners, the agricultural technology company CLAAS and Munich Technical University (TUM). This joint project is supported by the Landesjagdverband Bayern, with the project administration being handled by ZENTEC GmbH.

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Found! Thanks to High-Tech the fawn can be rescued

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establishing a wildlife finder system which follows the basic principle: "Find – Mark – Find again – Rescue – Safeguard.

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Financing granted: Representatives of the project partners together with Ilse Aigner, Federal Minister for Food, Agriculture and Consumer Protection

In the picture (from left to right): Prof. Dr-Ing. Erwin Biebl (Munich Technical University, Very High Frequency Technology), Maik Hunke (CLAAS, Product Manager), Markus Walberer (isa industrieelektronik GmbH, Managing Partner), Federal Minister for Food, Agriculture and Consumer Protection Ilse Aigner, Prof. Dr. Stefan Dech (DLR's German Remote Sensing Data Center, Director), Dr.-Ing. Peter Haschberger (DLR Remote Sensing Technology Institute, Head of Department), Prof. Dr. Jürgen Vocke (Bayerischer Jagdverband e.V., chairman).

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