

**CAMERA TRAPS INVISIBLE TO MAMMALS AND BIRDS IN THE SERVICE OF
NATURE CONSERVATION AND WILDLIFE MANAGEMENT**
The new generation of wildlife cameras

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We have examined over 70 camera traps available in stores and online. We paid special attention to testing 1080p and 2K 4K resolution, 25,30,50,60 frames per second wildlife cameras. The results of the tests were startling because it turned out that there is no commercially produced wildlife camera series that would go unnoticed by the examined 27 mammal and bird species. We tested the latest wildlife cameras with 840 nm and 940 nm LED (light-emitting diode) specimens multiple times in their natural habitats. During the tests, only one camera trap was deployed at a time period. Based on the large sample size, we can conclude that these cameras consistently alter the behavior of mammals and birds. The detection of camera traps depends on the following factors:

- The camera emits electromagnetic waves not within the spectrum range specified in the manufacturer's data, but with a starting decay below 800 nm;
- The camera emits sound (filter switching, relays);
- Some components of the camera have a mild but unfamiliar smell in the given habitat.

To study the natural behavior of animals and for disturbance-free research and filmmaking, we have developed a series of wildlife cameras that are undetectable by the mentioned species according to the listed criteria. They do not emit

- noise,
- visible wavelengths,
- disturbing odors,

and minimize electromagnetic pollution. The camera is available in both daytime (without LED) and daytime-nighttime versions, and we also produce telephoto, wide-angle, and dual-camera versions.