Avoid accidents with Wildlife by **Ellipse Blue Reflectors**

Traffic Safety Systems

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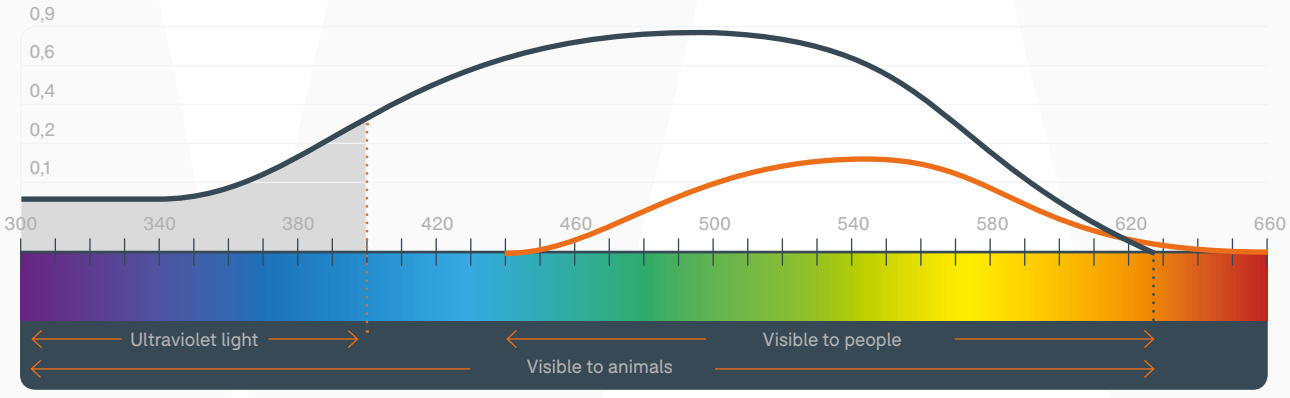
Werking

The Ellipse reflector is fitted with a microprismatic reflective film (3M Diamond Grade) such as it is known from reflective road signs. With an angle of reflected beam of 1,5˚ the light from the vehicles hitting the film creates a continuous high intensive light fence along the roadside. The even curve of the carrier material reflects the light in decreasing intensity further tot he side without the whole surrounding area being lightened up unnecessarily.

Animal color spectrum



Why blue?

Wild animals can only see and distinguish green and blue colours, yet the latter right into the UV sector! Red and orange are totally indistinguishable and only seen as different shades of green – which is why, on a hunt, we wear red high visibility clothing. For humans these garments have an intensive signalling effect, but for animals they just merge with the surroundings. In contrast, blue is a really terrifying colour as it does almost never appear in nature and is felt as strange, i.e. potentially dangerous. A number of scientific papers about how annimals see colours have been published in Europe and the USA.

In the eyes of wild animals, for example, a red jacket, the green color of trees, the brown of the autumm leaves and the withered grass result in a mixture of green shades.

In comparison to humans (gray background) many animals react very sensitive to blue-gray shades. Many animals species can even detect UV rays, however they do not see the red color.

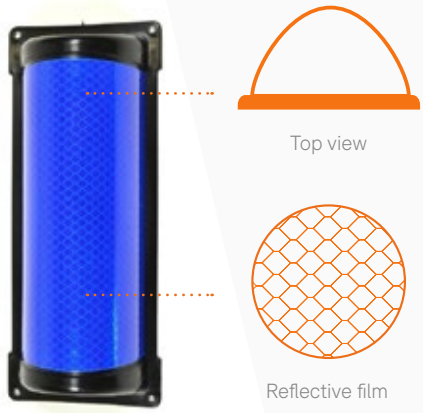
Mesopic vision

(Sensitivity of light – dark contrasts)

- The light sensitive rods in the eyes of hoofed game account for about 90% of the vision receptors.
- Only about 10% (“cones”) are responsible for color vision.
- The opening of the hoofed gama’s pupils are up to nine times larger than a human’s.
- The rods responsible for mesopic vision perceive the light energy emitted by the blue color as particularly bright – we see it as dark blue.

Why ellipse reflectors?

The ellipse shape has to do with the animals vision of motion. Herbivores in particular have their eyes on both sides of their heads in order to avoid enemies. They don’t see very clearly, but they react very sensitively to any kind of movement (as hunters know from experience!) The ellipse shape of the reflector in combination with the cars constantly changing angle of light impact simulates movement as in a hologram.



Conclusion from practical experience

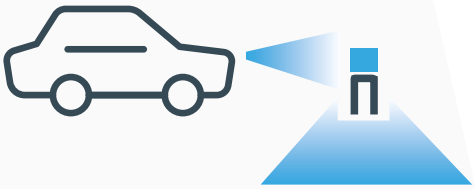
The evoluation of more than 200 questionnaires concerning areas where ellipse reflectors have been installed for more than 2 years shows a decline in nocturnal road accidents with roe deer by 73%.

Habituation effect?

On the basis of present experience there is no danger of habituation as, on the one hand, the color blue will always remain strange tot he animal, signifying danger, and on the other hand there are new generations growing up all the time (the average life expectancy of roe deer, for example, is about 3 years as o lot of them will be shot while being young).

Adjustment of the reflector to the inclination angle of the terrain?

Not necessary. The moment the cars light hit the reflector it lights up. A direct reflection is not required to warn the animals, the blue light suddenly appearling is enough.



Installation without gaps!

It has become apparent that animals will cross just directly through an opening in a row created by missing reflectors. Quote: “The reflectors are tremendously effective! It has to be kept in mind, however, that game try to circumvent the “reflector fence” in the case of heavy traffic” Therefore an accasional control is recommended.

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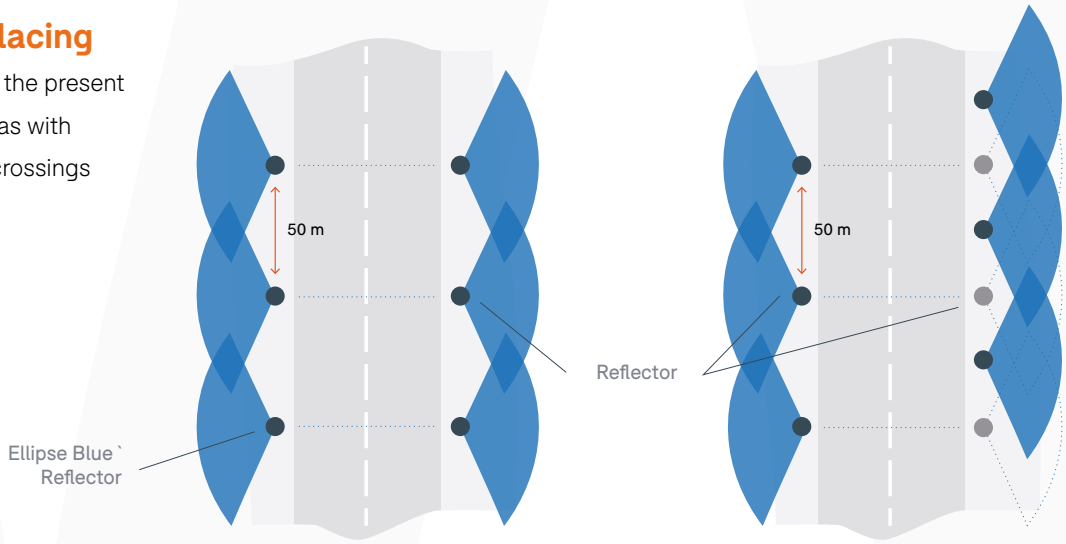
Advice for placing

Each 50 meter on the present delineators. In areas with intensive wildlife crossings each 25 meter.



50 m **25 m**

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Technical description

- Base body of weather-proof polypropylene copolymer.
- Heat resistant, good impact resistance even in low temperatures, no splintering.
- UV protection by carbon black.
- Microprismatic blue reflective film by 3M Diamond Grade
- Dimensions: 210 x 70 x 50 (LxWxH)
- Weight: 90 gram