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## Method for ecological monitoring based on research of ground beetle fauna (Coleoptera, Carabidae).

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Carabidae is a suitable group for conducting ecological monitoring. We proposed the procedure based on our studies carried out at 2007-2008 in flood land territories in the Karmaskalinskiy Region of the Republic Bashkortostan.

Our methods were the following.

- 1. Choice of biotopes for the investigation.
- 2. Determination of the basic sources of the anthropogenic influence.
- 3. Isolation of the individual sections of an investigation, the installation of trap series.
- 4. Determination of individual anthropogenic factors and division by effect.

Beetles collection and determination will be carried out at the second stage. Female index will be defined too.

Analysis of investigation results.

Assessment of the domination degree, the quotient of faunistic and quantitative similarity will be used for analysis. The relative number of ground beetles will be determined using average catch efficiency.

These data allow us to draw conclusions about the degree of influence of anthropogenic factors to ground beetle fauna in individual biotopes, and about factors that have negative influence. We studied 3 biotopes and estimated the degree of degradation ground beetle fauna and the possibility of its development. The most negative anthropogenic factor was related to truck traffic.