

MANUAL

There are two ways to use the program: using example coefficients and using other coefficients.

Example coefficients are available for eight different interactions such as Eagles-Seagulls, Seal-Herring, Seal-Steelhead trout, Ladybug-Aphid, Lion-Wildebeest, Lion-Zebra, Wolf-Elk and Spider-Fly.

For those interactions preset coefficients are available presented in the table below.

	eagles - seagulls	seal- herring	Seal- steelhead trout	Ladybug - Aphid	Lion - Wildebeest	Lion - Zebra	Wolf - Elk	Spider - Fly
growth rate prey	0,2327	0,4	0,7	0,3	0,405	0,34	0,05	0,1
death rate predator	0,1809	0,1	0,1	0,1	1,5	1,5	0,23	0,5
predation rate	0,02417	0,01	0,01	0,9	0,81	0,75	0,19	0,001
conversion rate of preys into predators	0,00187 6	0,002	0,001	0,005	0,125	0,125	0,07	0,001

Those numbers were taken from scientific publications on the topic of predator-prey interactions between species.

To get plot of ready-made predator-prey interaction:

1. Choose one of eight pairs of species from the menu and click «confirm».
2. Enter initial number of prey, initial number of predators, DT (time step) and time.
3. Click «Make plot».

To get plot of any predator-prey interaction:

1. Enter initial number of prey, initial number of predators, DT (time step) and time.
2. Enter growth rate of prey, death rate of predators, predation rate and conversion rate of preys into predators.
3. Click «Make plot».

To add new interaction to the ready-made database:

1. Fill ALL the parameters.
2. Click «Add to database».