

FORECAST OF THE EMERGE PERIOD OF HADROBREGMUS PERTINAX (L.) – THE PEST OF THE HISTORIC TIMBER STRUCTURES

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House borer (*Hadrobregmus pertinax* L.)



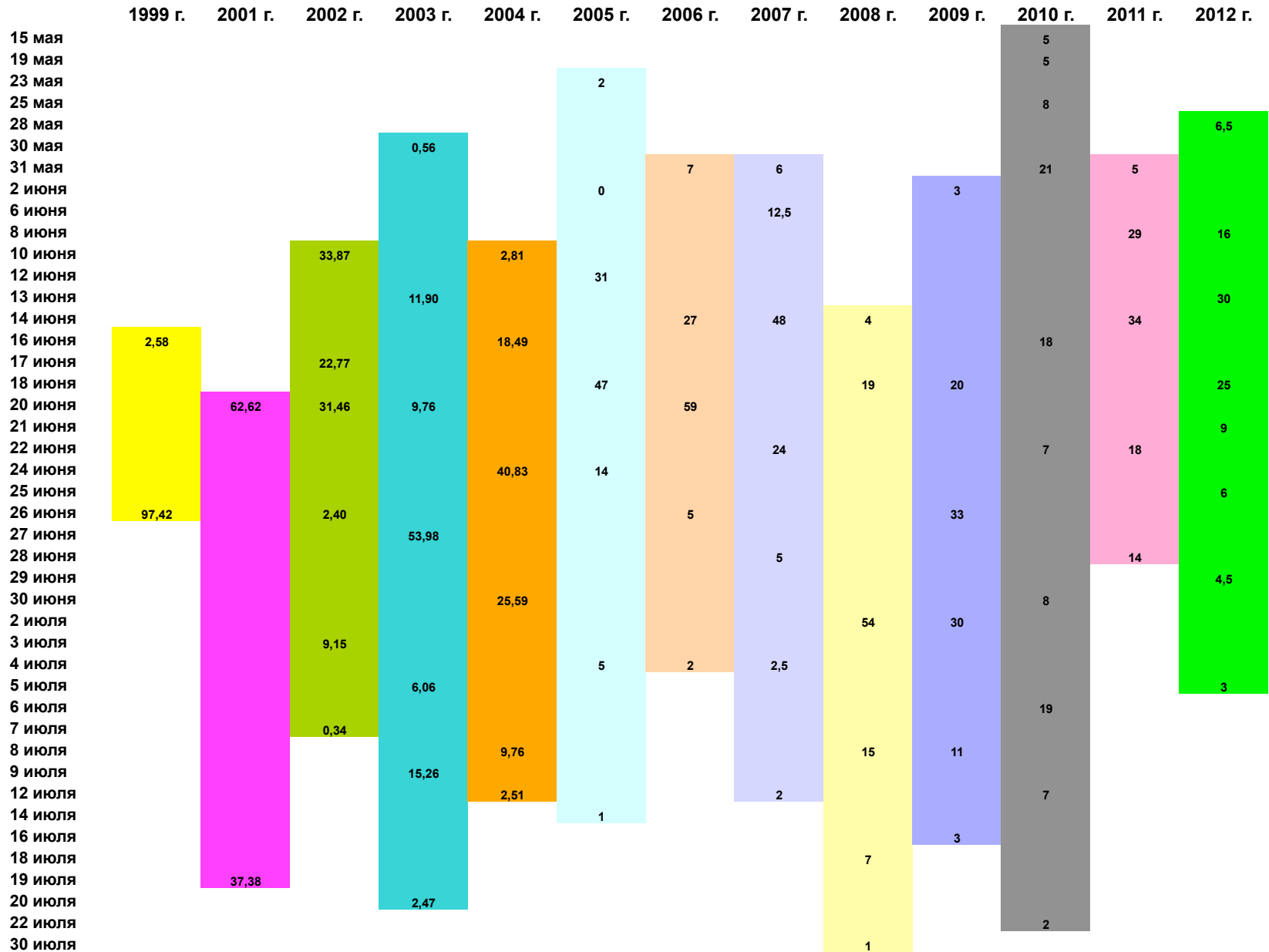
Damages caused by borers



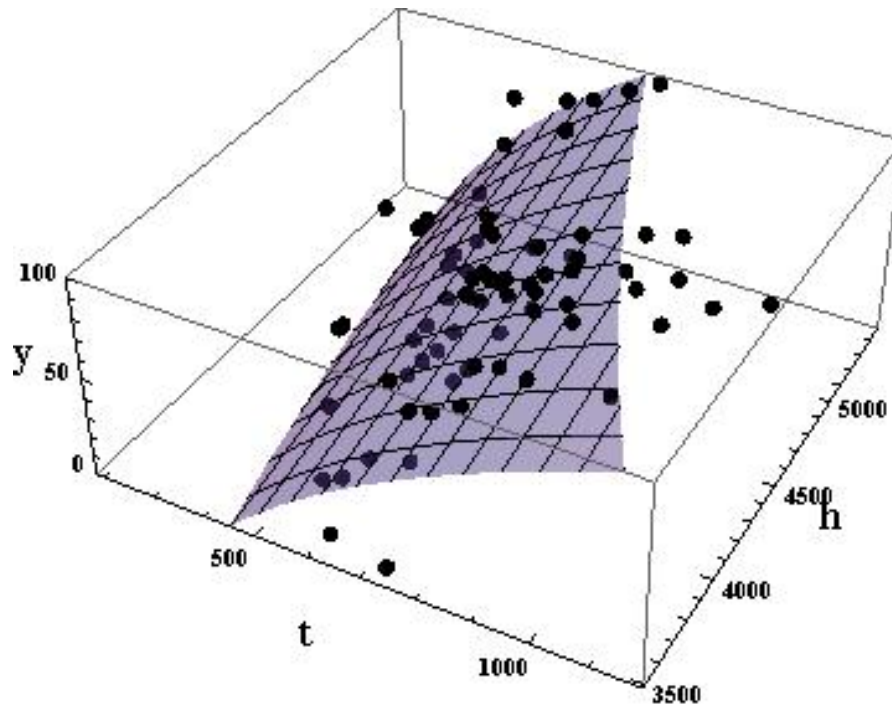
Borers catching in the open-air museum “Kizhi”



Emerge time for borers



Dependence of emerge time (y) from temperature (t) and humidity (h)

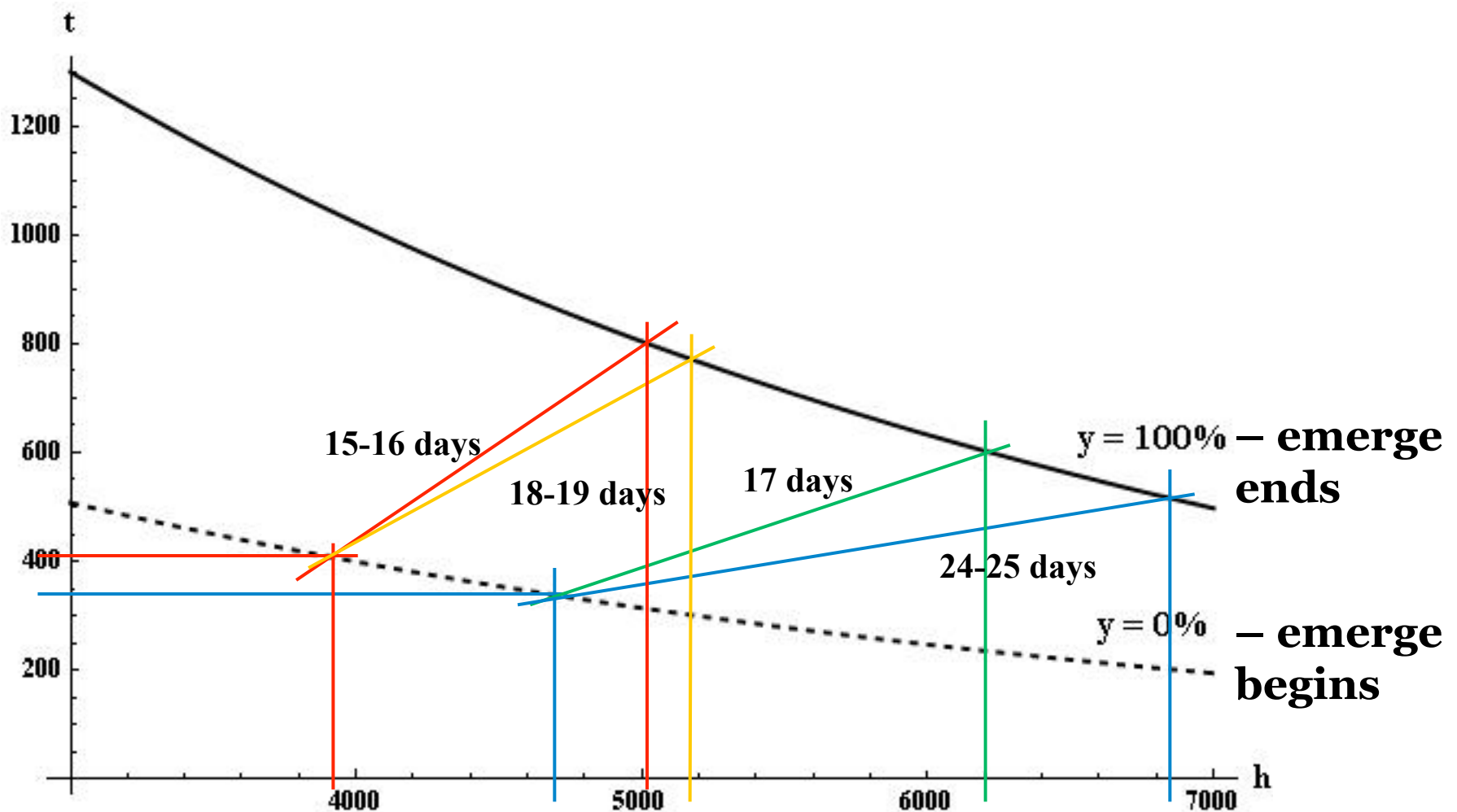


The period of influence of climatic factors – 8 weeks.

$$y = \begin{cases} 0, & \ln t \leq 6.95 - 0.00024h; \\ -741.2 + 106.6 \ln t + 0.026h, & 6.95 - 0.0003h < \ln t < 7.89 - 0.00024h; \\ 100, & \ln t \geq 7.89 - 0.00024h. \end{cases}$$

$$(R^2 = 0.7)$$

The prognosis of the borers emerge beginning and the end



Using of microwave heat treatment for eradication of pests





Thank you!