

Avoiding bird collisions with glass surfaces. Test of 12 markings in the Flight Tunnel II. Colours – patterned film – toned acrylic glass.

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german version (250 KB pdf)

<http://wua-wien.at/images/stories/publikationen/vogelschlagstudie-2008.pdf>

*„Vermeidung von Vogelanzprall an Glasflächen
Farben – Glasdekorfolie – getöntes Plexiglas
12 weitere Experimente im Flugtunnel II“*

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The present fourth „annual report“ discusses the experiments concerning bird collisions with glass panes executed at the Biological Station Hohenau-Ringelsdorf (Austria) in 2007. The markings which were tested with wild birds in a flight tunnel get successively developed, based on the results of foregone years. It could be shown that birds can recognize even very small markings in many cases. But the space between pattern elements must be limited, otherwise gaps would be used as „loopholes“.

One issue of the present report was the suitability of different colours. It shows that orange markings yield the best results, regardless of the light situation. For now no other colours are recommended.

Furthermore a marking placed on a noise protection wall in Vienna has been analysed. This was the first experiment to test the efficacy of motion parallax. The marking can be recommended, positive effects due to oscillopsia are possible.

Patterned film was another issue of the tests. It became apparent that the share of covered area has to be higher with semitransparent film than with nontransparent film. This applies to every light situation, but especially to poor light situations.

After two years of testing white and black markings, it shows that white markings are better in low light situations. Black markings are more suitable in bright light (sunny sites, bright backgrounds).

Furthermore it has been analysed whether toned panes are more dangerous than clear floatglass. This hypothesis could be negated.

In the present report only markings with less than 10% „wrong decisions“ in the choice test (collisions with the marked pane prevented by a mist net) are recommended. A simple verification that a marking is „effective“ is not sufficient any longer.



5.9%



6.2%



35.3%



10.7%



11.1%



11.9%



5.8%



13.3% (matt) 21.4% (glossy)



12.8%



21.8%



15.9% (one side) 9.9% (both sides)

“%“ birds flying towards the marked pane in the choice experiment



Flight Tunnel II 2007