

“The Lily Pond Parable” from EcoFuture

<http://www.ecofuture.org/pop/facts/exponential70.html>

1. If a pond lily population doubles every day, and it takes 30 days to completely cover a pond, on what day will the pond be $\frac{1}{4}$ covered?
2. If a pond lily population doubles every day, and it takes 30 days to completely cover a pond, on what day will the pond be $\frac{1}{2}$ covered?
3. Does the size of the pond make a difference?
4. What kind of environmental consequences can be expected as the 30th day approaches?
5. What will begin to happen at one minute past the 30th day?
6. At what point (what day) would preventative action become necessary to prevent unpleasant events? Explain your reasoning.

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