

Quiz Fiver: Econ. 45535 -Natural Resource Economics Fall 1999

1. In his article "Free Riders en Route to Disaster," Julian Edney describes a common property game involving nuts in a bowl.

Briefly put, assume the game was as follows:

individuals were divided into groups and each group was given a bowl that contained some nuts

told that the number of nuts in the bowl would double every few minutes

told that anyone in the group could remove as many nuts as they desired at any point in time

told that at the end of the game each individual could redeem the nuts that he or she collected for \$x a nut, and one could keep the money.

told that the game would last one hour

That is, Edney created a renewable common property resource that could be exploited for free by any member of the group.

Edney describes some of the group solutions to the game as quite creative. Quoting him, "One of the groups, for example, decided that to slow down the harvest, they would have to skewer each nut on the end of a pencil, balance it on their noses, and walk over to deposit it in a chalkboard tray before returning for another single nut." Edney seems to feel that this "solution" efficiently solved the common property problem. Discuss whether it did.

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Simply put, No it did not.

The "solution" does decrease the harvest rate, but, to put it simply, it does it by wasting everyone's time.

It also does not achieve the efficient harvest rate. In this case, the best thing for the group to do from an efficiency perspective is not to remove any nuts from the bowl until right before the end of the game. Balancing pencils on noses won't accomplish this.

So, in summary, the "solution" is inefficient for two reasons: it wastes the time of the harvesters (unless they have nothing better to do), and it does not reduce the harvest rate to zero.

Note that how the group divides up the money at the end of the game is an issue of equity, not efficiency.