Trespassing Bees in California – Ronald Coase to the Rescue

Ronald Bailey | Jan. 9, 2009 10:37 am

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Bees are trespassing into California mandarin orange groves, according to the Associated Press. Here's the scoop:

> Is it trespassing when bees do what bees do in California's tangerine groves?
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> That is the question being weighed by state agriculture officials caught between beekeepers who prize orange blossom honey and citrus growers who blame the bees for causing otherwise seedless mandarin oranges to develop pips.
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> "Both sides are unwilling to give any ground, and both have valid points," said Jerry Prieto, the former Fresno County agricultural commissioner who has spent six months mediating the dispute.
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> The fight comes amid a worldwide consumer taste shift toward seedless grapes, watermelons and tangerines — at the same time the nation's struggling bee colonies look for winter food.
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> The California Department of Food and Agriculture is scheduled to issue draft regulations this month that will require beekeepers to register their locations with county agricultural commissioners by March 1 so growers can monitor hives within two miles of their groves. If bees are too close, growers can ask beekeepers to move and hope they comply.
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> "But they won't have to move," said Rayne Pegg, deputy secretary of legislation and policy for the CDFA.
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> Absent a method of resolving disputes, Prieto predicted: "This is going to end up in court."

But this situation doesn't have to end up in court or need government regulations. After all, Nobel Economics laureate Ronald Coase explained, absent substantial transactions costs, the initial allocation of property rights does not impede achieving the most economically efficient result. Why? Because parties can negotiate their differences and figure out whose activities are more valuable. The party whose activities earn more can pay off the other party and proceed. (Economist Steven Levitt has a nice explanation of the "Coase Theorem" at his Freakonomics blog.)

But perhaps the transactions costs are too high in this case. In fact, Economics Nobelist James Meade used exactly this bee situation to try to disprove the Coase's arguments, but as economist David Friedman explained in *Reason* some years ago it is, in fact, a near perfect example of Coasean bargaining:

> Meade offered, as an example of the sort of externality problem for which Coase's approach offered no practical solution, the externalities associated with honey bees. Bees graze on the flowers of various crops, so a farmer who grows crops that produce

> nectar benefits the beekeepers in the area. The farmer receives none of the benefit himself, so he has an inefficiently low incentive to grow such crops. Since bees cannot be convinced to respect property rights or keep contracts, there is, Meade argued, no practical way to apply Coase's approach. We must either subsidize farmers who grow nectar rich crops (a negative Pigouvian tax) or accept inefficiency in the joint production of crops and honey.
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> It turned out that Meade was wrong. In two later articles, supporters of Coase demonstrated that contracts between beekeepers and farmers had been common practice in the industry since early in this century. When the crops were producing nectar and did not need pollenization, beekeepers paid farmers for permission to put their hives in the farmers' fields. When the crops were producing little nectar but needed pollenization (which increases yields), farmers paid beekeepers. Bees may not respect property rights but they are, like people, lazy, and prefer to forage as close to the hive as possible.
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> The fact that a Coasian approach solves that particular externality problem does not imply that it will solve all such problems. But the observation that an economist as distinguished as Meade assumed Coase's approach was of no practical significance in a context where it was actually standard practice suggests that the range of problems to which the Coasian solution is relevant may be much greater than many would at first guess.

So which is more valuable--seedless mandarin oranges or citrus blossom honey? I suspect that what is happening is that the mandarin orange growers and the beekeepers are both hoping the courts/bureaucrats will side with them and thus avoid having to pay whichever party the costs for the externalities they impose. That would mean that one party would get to impose their externality on the other party without having to pay for it, resulting in a overall loss of economic efficiency. Sigh.

One more note: Coasean bargaining is a dandy way to handle those nasty cross-pollenation disputes between organic farmers and farmers who want to grow genetically enhanced crops. See also *Reason's* 1997 interview with Coase here.

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