## For Scientists, a Beer Test Shows Results as a Litmus Test

## By CAROL KAESUK YOON

Ever since there have been scientists, there have been those who are wildly successful, publishing one well-received paper after another, and those who are not. And since nearly the same time, there have been scholars arguing over what makes the difference.

What is it that turns one scientist into more of a Darwin and another into more of a dud?

After years of argument over the roles of factors like genius, sex and dumb luck, a new study shows that something entirely unexpected and considerably sudsier may be at play in determining the success or failure of scientists — beer.

According to the study, published in February in Oikos, a highly respected scientific journal, the more beer a scientist drinks, the less likely the scientist is to publish a paper or to have a paper cited by another researcher, a measure of a paper's quality and importance.

The results were not, however, a matter of a few scientists having had too many brews to be able to stumble back to the lab. Publication did not simply drop off among the heaviest drinkers. Instead, scientific performance steadily declined with increasing beer consumption across the board, from scientists who primly sip at two or three beers over a year to the sort who average knocking back more than two a day.

"I was really surprised," said Dr. Tomas Grim, the author of the study and an ornithologist at Palacky University in the Czech Republic, who normally studies the behavior of birds, not scientists. "And I am happy to see that the relationship I found seems to be very well supported by my new observations in pubs, bars and restaurants."

Dr. Grim, carried out the research by surveying his fellow Czech ornithologists about their beer drinking habits first in 2002 and then in 2006. He obtained the same results each time.

The paper has quickly been making the rounds among biologists, provoking reactions like surprise, nervous titters and irritation — often accompanied by the name of a scientist whose drinking is as impressive as his or her list of publications.

Matthew Symonds, an evolutionary biologist at the University of Melbourne who has also studied factors affecting scientific productivity, called the results remarkable.

## Gathering data on a national pastime in the Czech Republic.

"It's rather devastating to be told we should drink less beer in order to increase our scientific performance," Dr. Symonds said.

Though the public may tend to think of scientists as exceedingly sober, scientific schmoozing is often beer-tinged, famous for producing spectacular breakthroughs and productive collaborations, countless papers having begun as scrawls on cocktail napkins.

Yet the new study shows no indication that some level of moderate social beer drinking increases scientific productivity. Some scientists suggest that biologists in the Czech Republic could prove to be an anomaly, given that the country has a special relationship to beer, boasting the highest rate of beer consumption on earth.

More important, as Dr. Grim pointed out, the study documents a correlation between beer drinking and scientific performance without explaining any correlation. That leaves open the possibility that it is not beer drinking that causes poor scientific performance, but just the opposite.

Or, as Dr. Mike Webster, an ornithologist and a beer enthusiast at Washington State University in Pullman, said, maybe "those with poor publication records are drowning their sorrows."

In spite of his study, Dr. Grim, who said he would on occasion enjoy more than 12 beers in a night, is not on a campaign to decrease beer drinking among scientists. Why not? His answer: "I like it."