ON THE RECORD

“Since I’m not in academia, I only publish papers when I think I’ve found something cool.”

Garrett Lisi, surfer, snowboarder, physicist and author of the much discussed grand-unification preprint “An Exceptionally Simple Theory of Everything” endears himself still further to the academic mainstream.

ZOO NEWS

Climbing the walls

Keepers at St Louis Zoo in Missouri remain baffled as to how a cheetah managed to scale a 3-metre wall and briefly escape her enclosure — despite the fact that this is the third time one of the cats has achieved this feat at the same exhibit since 2000.

M. JACOB, ST. LOUIS ZOO

SCORECARD

Plastic snakes

Officials in the Australian city of Tamworth have enlisted toy snakes in an attempt to scare away tens of thousands of starlings messing cars and terrorizing residents with their droppings.

Irish salmon

Northern Ireland’s only salmon farm has been wiped out after a 26-square-kilometre swarm of jellyfish destroyed 100,000 fish, causing damage valued at more than US\$2 million.

SHOWBIZ NEWS

Queen chancellor

Brian May’s stellar academic career continues apace — fresh from defending his doctoral thesis on astrophysics, the former Queen guitarist has been appointed chancellor of Liverpool John Moores University.

Sources: The Daily Telegraph, BBC, Reuters, Associated Press

Plant-disease controls sap outbreak responses

Microbiologists in the United States are expressing concern about a government proposal to limit research on several plant pathogens because of their potential to be used as bioweapons. The researchers say that the plan to subject rice and citrus disease agents to the same restrictions as Ebola virus and anthrax are ill-conceived and will limit the response to a natural outbreak.

The US Department of Agriculture (USDA) plans to add four plant pathogens to the government’s list of ‘select agents’. Created to keep infectious diseases out of the hands of would-be terrorists, the current list includes 81 human, animal and plant pathogens and toxins. Researchers studying substances included on the list must confine their work to high security labs, file mountains of paperwork and submit to background checks.

The latest draft includes pathogens of rice, citrus, rye and deciduous trees that have wreaked havoc elsewhere, but have not crossed US borders. The USDA is accepting public comment on the proposal until 3 December.

Many scientists think that plant diseases should not be lumped with deadly human pathogens such as smallpox. Most plant-disease research is already subject to strict regulation and quarantine, they point out. Adding more plant diseases to the select-agent list could have a chilling effect on research, says Jan Leach, a microbiologist at Colorado State University in Fort Collins, who studies *Xanthomonas oryzae*, a bacterium that causes leaf blight of rice. “Some of us will just drop out. We won’t

work on those pathogens anymore,” she says.

Her lab halted research on one strain after it was added to the list. But if the proposed changes go forward, all strains would be subject to the extra regulations. The disease — endemic in Asia and Africa — poses minimal threat to the United States because of different climate and farming techniques, she says.

In Florida, the select-agent law stymied the state’s response to a 2005 outbreak of citrus greening, says Wayne Dixon, a senior plant pathologist at Florida’s agriculture department in Gainesville. Now, the USDA plans to remove from the list one strain that is widespread in Florida, while adding another that is currently hitting orange trees in Brazil. Dixon worries that if the Brazilian strain hits Florida, research and epidemiology will again be handcuffed by the disease’s select-agent status. For example, researchers who perform lab tests on potentially infected tree samples must destroy them if the sample reveals a positive result.

Michael Firko, a USDA official who was involved in drawing up the new select-agent list, says the agency attempts to balance national security with scientific freedom by updating the list biennially and seeking input from researchers. He cites the delisting of plum and soya bean diseases in 2005 and the current proposal to remove one strain of citrus greening. Yet for many plant pathologists, these changes don’t happen often enough or fast enough. “We had our hands tied for two years,” says Dixon.

Ewen Callaway

L. M. ALAVREZ/AP

Southern Gardens Citrus in Clewiston — one of Florida’s biggest producers of oranges — has so far lost almost 100,000 trees to the bacterial disease citrus greening (infected leaves shown left). Giving such pathogens ‘select-agent’ status can handcuff research and epidemiology, delaying response to outbreaks.