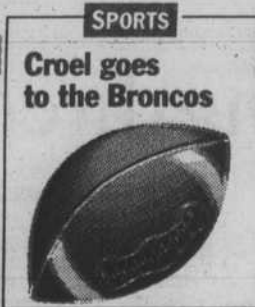


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Michelle Paulman/DN

Tim Jones, an associate professor of oral biology at UNL, cradles one of the chicks he uses in his ear research.

Fowl discovery

Professor hopes bird experiments lead to better human hearing

By Mark Harms
Staff Reporter

To study the properties of balance, Tim Jones has spent eight years working on a technique to measure nerve impulses — specifically, nerve impulses emitted by the part of a chicken's ear that controls balance.

However, at a meeting of ear scientists in 1990, Jones, an associate professor of oral biology at the University of Nebraska-Lincoln, heard of a discovery that gave his measuring techniques another use; helping to find out how chickens, after losing their hearing, can regenerate their damaged nerves and hear again.

The discovery, Jones said, "caused a kind of clamor among ear researchers."

Until recently, he said, scientists had thought that birds, like mammals, could not regenerate nerve tissue once it had been damaged.

But in 1989 and 1990, researchers at the University of Virginia — after causing chickens to go deaf with high-volume noise — found that the birds regained their hearing within two months.

Before concluding that the nerves in the chicken's ears actually had regenerated, Jones said, scientists needed more evidence.

He said he thought that if the hearing nerves in chickens could regenerate, perhaps the balance nerves in their ears could regenerate as well.

Late last year, Jones and his lab technician, Rick Nelson, set up an experiment in their

laboratory at the Dental College on East Campus.

First, Jones said, they measured the nerve impulses in the ears of several healthy chicks.

Next, Jones and Nelson injected a drug that damages the ear's nerve tissue. Then they measured the chicks' nerve impulses from day to day.

Shortly after the drug was injected, Jones said, the chicks' ears emitted no measurable nerve impulses. But, within a few days, the impulses began to return.

After 60 days, he said, the chicks' responses were the same as they were before the drug was injected.

"The study went beautifully," Jones said.

He said the experiment, completed last February, showed that the dead nerve cells had been replaced.

A scientific journal called Hearing Research is publishing the results, he said, and copies should be available at libraries soon.

Now, Jones is working with a molecular biologist at Harvard University to try to isolate what causes the nerves to regenerate.

It appears that birds have a gene that produces a special protein, he said, which causes nerve cells to divide in order to replace dead ones.

"If we knew what turns on the cells to regenerate, then maybe we could do the same with mammals," he said.

Jones said their long-term, "pie-in-the-sky" goal was to find a way to replace damaged ears in humans.

"But that's a long way off," he said.

Perot's entry may complicate election

By Jeremy Fitzpatrick
Staff Reporter

Ross Perot's late entry into the presidential race will complicate the election and could result in Congress selecting the president for only the third time in the history of the United States, a professor said.

UNL political science professor Robert Sittig said Perot, who announced he would actively campaign for the presidency Thursday, has little chance of winning the election. But Perot could play a significant role in determining who will win, he said.

"I anticipate a close race, and it could be even closer in the Electoral College," Sittig said. "So when you put the Perot factor in, it's going to get a lot more complicated."

"If the election is otherwise close

See ELECTION on 2

Toxic drug hits streets of Lincoln

By Susie Arth
Staff Reporter

The Lincoln/Lancaster County Narcotics Unit is warning students not to believe everything they hear.

A highly poisonous substance called jimsonweed, or "moonflower," is being distributed on Lincoln streets as opium with hallucinogenic effects. But in reality, the drug is a highly poisonous substance, said Lt. Duaine Bullock of the narcotics unit.

"It's being sold as something it's really not," Bullock said. "I hope people will take heed."

Bullock said people were either eating jimsonweed as a seed or drying it and eating it as marijuana.

The narcotics unit has received several reports of the drug, he said, and he believes there is a lot of it floating around the streets.

The drug, Bullock said, is being called "moonflower" on the streets. In low doses, he said, it can cause

See DRUG on 2

Rail crossings may be eliminated

By Angela Opperman
Staff Reporter

The Railroad Transportation Safety District Board is laying down tracks for a plan to eliminate railroad crossings north of the University of Nebraska-Lincoln.

HWS Engineering Inc. of Lincoln has studied different railroad routes, from Eighth and V streets to 33rd Street and Cornhusker Highway, and has recommended that some of the routes be merged.

The engineering company outlined ways to reroute trains away from City

Campus, where students have been darting under and in front of trains.

Andrew Loudon, speaker of the senate for the Association of Students of the University of Nebraska, said ASUN's major concern was the safety of female students who had to wait in a parking lot north of the tracks at night when trains passed.

"We trust students' judgment not to foolishly jump in front of a train," he said. "Our main issue is safety for the students who get stranded out there."

And students aren't the only ones who have to wait for trains to pass,

Loudon said.

"People who attend events at the (Bob Devaney Sports) Center or fairgrounds have the same problem," he said.

Some students who aren't used to trains have complained about the noise, Loudon said, but that was a minor issue.

The firm's findings recently were presented to the Railroad Transportation Safety District, which is made up of County Board and City Council members.

Dangerous Railroad Tracks

All or a portion of a Union Pacific track is proposed to be removed. Students often crawl across idle train cars to make it to class on time. Traffic is also backed up.

Union Pacific track proposed to be abandoned or partially removed

Area parking

Area parking

Area parking

Area parking

Area parking

Area parking

Area parking

Area parking



Source: UNL Parking Services

Scott Maurer/DN