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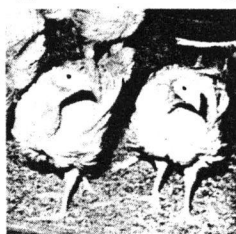
R E P O R T

News You Can Use from the Ohio Agricultural Research and Development Center
College of Food, Agricultural, and Environmental Sciences; The Ohio State University

Dr. Thomas L. Payne, Director
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Turkeys and quail: Stronger legs, fewer diseases—and ties to human health?

► No longer falling and not getting up

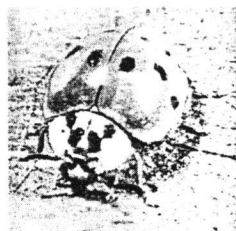


Turkeys bred for more breast meat were having a hard time holding the weight up—or even walking—until an OARDC scientist stepped in. Karl Nestor saw the problem and developed **turkeys with stronger legs**. *Result: Fewer losses for producers and larger, meatier birds for consumers.* Nestor is now using DNA fingerprinting to **increase disease resistance** in gobblers. And, in research that could **benefit human health**, Nestor and colleagues are studying smooth muscle tumors in female Japanese quail—a bird often used in turkey studies (it responds about the same but reproduces faster). The tumors need estrogen to grow and may be directly related to body weight. Future work will determine what causes the tumors and how the findings may help women, who sometimes get this type of tumor.

Karl Nestor is in the Department of Animal Sciences. For more information, ask for #292. Free. Contact SCT, OSU/OARDC, 1680 Madison Ave., Wooster, OH 44691, (330) 263-3700, ct-oardc@osu.edu.

Black and yellow and spread all over: Ladybug swarms are an Asian import

► Don't tread on me: I eat pests and will leave a stain



You might have noticed **swarms of ladybugs** on your house, barn or self this fall. If so, you weren't alone. Sightings were reported across the country. The creatures were harmless **Asian lady beetles**, which are a bit larger and slightly different color (pale yellow to orange) than native Ohio lady beetles. *Why you might not have seen them before:* The USDA introduced the bugs into Louisiana and Mississippi as a biological control for pecan aphids; the beetles feasted and spread. Their **appetite for pests is a plus**. But scientists aren't sure of their effect on native lady beetle populations.

For more information, ask for #293. Free. Contact SCT, OSU/OARDC, 1680 Madison Ave., Wooster, OH 44691, (330) 263-3700, ct-oardc@osu.edu.

Cattle: New vaccine could beef up health and profits

► Common victims of rotaviruses: Calves and other young animals

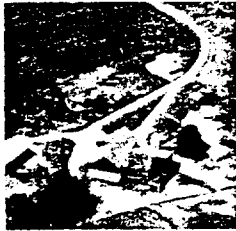


Using bioengineered virus-like particles, OARDC and Baylor University scientists have teamed up to produce a **new type of noninfectious rotavirus vaccine for cattle**. Commercial development may lead to a new generation of safe, highly effective rotavirus vaccines—ones that when injected into cows induce passive immunity in their calves. Rotavirus infections cause diarrhea and other problems; the productivity of sick animals goes down. The new vaccines would **improve cattle health** along with **farmers' profits**.

Research by Linda Saif, Food Animal Health Research Program, and colleagues. For more information, contact (330) 263-3744 or saif.2@osu.edu.

Study: Can what the Amish do help other farms, too?

► Roots in the past, keys to the future?

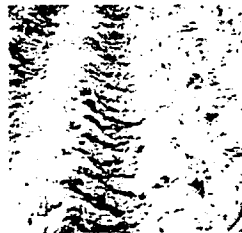


What makes some Amish farms work so well may be key to the future of many small and mid-size farms. In the Killbuck watershed in Holmes County, scientists with the Agroecosystems Management Program are studying three Amish farms. They're trying to understand what makes the farms tick and to see what can be applied to **conventional farming**. *Reason:* Mainstream farms are being squeezed—by low commodity prices, environmental regulations, land costs and the push to expand. Some are going under. Amish farmers face similar pressures, yet **many of their farms and communities are thriving**. What can be learned? So far, the study has found the farms to be productive, profitable and nutrient-efficient, while the families maintain a high quality of life on very low expenses. The scientists say the keys—**cooperation, flexibility and holistic management**—can be used by any type of farm.

Research by Richard Moore, Department of Anthropology, and Debbie Stinner, Department of Entomology. For more information, ask for #294. Free. Contact SCT, OSU/OARDC, 1680 Madison Ave., Wooster, OH 44691. (330) 263-3700, ct-oardc@osu.edu.

Corn and soybeans: Ridge tillage doesn't hurt yields

► Ridge-till study: Yields stay OK



A study by scientists with the Management Systems Evaluation Area, or MSEA, project found no difference in corn and soybean yields and no increase in weeds when comparing **ridge tillage** to other systems. The findings rule out lower yields as a drawback to using ridge tillage—at least on well-drained soils—and may help increase its adoption in Ohio. Ridge tillage offers economic and environmental benefits, including **reduced herbicide use and less runoff** into streams. The MSEA is near **Piketon** in southeastern Ohio.

Research by Norm Fausey, USDA-ARS, Department of Food, Agricultural, and Biological Engineering, and colleagues. For more information, contact (614) 292-9806, fausey.1@osu.edu.

Secret Arboretum: A reason to go and walk around in the snow

► You'd think there'd be a Siberian spruce—and there is (at B01 on the map)



Want to turn your winter green? Get a copy of *A Finder's Guide to Evergreen Trees in OARDC's Secret Arboretum*—then come to **Wooster** and start looking around. The brochure shows the locations of several hundred **pin**es, **firs**, **spruces** and more in the 85-acre facility. Also included are **hollies**, **cedars**, **yews** and **deciduous conifers**, which drop their needles in fall. With the holidays and winter approaching, it's a good time of year to enjoy these plants. Picture a cardinal in a 'Christmas Carol' American holly. Or a Canada hemlock cloaked in newfallen snow. (Then picture cranking up the heater *real high* when you get back to the car.) Beauty notwithstanding, the plants are here for research—on winter hardiness, of course, and more.

Free. Ask for #295. Contact SCT, OSU/OARDC, 1680 Madison Ave., Wooster, OH 44691. (330) 263-3700, ct-oardc@osu.edu. Secret Arboretum is part of OARDC's Wooster campus. Admission is free and open to the public seven days a week from dawn to dusk.



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