



# W O G S

## Worthwhile Operational Guidelines & Suggestions

BROILER PROCESSING TIMELY INFORMATION – JULY 2005

### Sampling the litter – doesn't have to be a drag!

Sampling the house environment is a critical component of any flock health surveillance program. Early information obtained on the *Salmonella* or *Campylobacter* status of market age flocks may be especially useful when determining processing order so that flocks free of foodborne pathogens are processed first. Grabbing samples of litter from throughout the house or drag swabbing the surface of the litter are the two traditional sampling methods, but there are alternatives. Recent research at Auburn University evaluated the use of surgical shoe covers as an environmental monitoring method. Surgical shoe covers are readily obtainable from laboratory or medical supply stores and are placed over the disposable plastic boots typically worn by the supervisors. Field studies of *Salmonella* show that surgical shoe covers are more effective (12.5%) in recovering *Salmonella* than drag swabs (2.1%). Surgical shoe covers were also able to recover more *Salmonella* serotypes than drag swabs.



But do any of these sampling methods accurately reflect the litter microflora? The answer is YES! A separate study on *E. coli* recovery from the litter found that surface sampling methods, such as surgical shoe covers, do recover isolates that represent the litter microflora when compared to both deep and shallow litter grab samples. The surgical shoe cover sampling method will save both time and money. Flock supervisors can perform litter sampling during regular visits and samples are processed in the laboratory similar to drag swabs. At only \$0.70 per pair of shoe covers (compared to \$1.50-\$2.00 per drag swab, not including preparation time), this method is also cost saving. Are you ready to make flock health monitoring easier?



Contact: B. McCrea      Phone: (334) 844-2619  
E-mail: mcreba@auburn.edu

Poultry Science Department, Auburn University, Auburn, AL 36849-5416  
[www.ag.auburn.edu/dept/ph/](http://www.ag.auburn.edu/dept/ph/)