

## East Africa

The continuing unrest in Rwanda has forced the CRSP to close its research site there. The losses, in terms of the deaths, disrupted lives, and lost expertise of both the professional staff and the area farmers, are immeasurable. In an effort to minimize the overall loss to the region and to the aquaculture community, the CRSP has been actively engaged in selecting a new site from which to build regional capacity in aquaculture research. The selection process has entailed much research, several site visits, extensive correspondence, laboratory analyses of soils and water samples, and other exploratory efforts, and the process is still underway. Site selection criteria have been developed, data have been collected from several sites, promising sites have been evaluated, and work has begun on a characterization of African soils. A final determination will be made by the time the Continuation Plan commences.

In addition to soil studies, members of the Africa team at Auburn are investigating the effect of temperature on appetite and growth response of tilapia fry. The results of the study will enable researchers to investigate the effects of growth rate on the timing of gonadal differentiation and the efficacy of sex reversal, leading to more efficient use of hormone-treated feed. Preliminary studies have not yielded sufficient data, and further trials are planned to obtain the needed data points.

It is an indicator of the resiliency of the collaborative research process that research experiments are portable among sites. As an example, researchers noted that worldwide, red tilapia have generally been perceived by producers as having greater consumer acceptance, although existing research indicates that the growth rate of Nile tilapia is superior. In trials currently underway, Auburn researchers working at the El Carao Fish Culture Station in Comayagua, Honduras, are investigating the reproductive efficiency of Nile tilapia and red tilapia, and their comparative growth and efficacy of sex reversal. The work is being carried out at the El Carao Station, but the impact of the results will be important for tilapia farmers throughout the world. Researchers at El Carao are also investigating the growth and efficiency of sex reversal of Nile tilapia that are fed hormone-treated feed stored under different storage regimes, another study that was originally programmed for the Rwanda site.

Work at OSU continues the biotechnological research focus of the Egypt project by examining the efficacy of a short-term immersion procedure for masculinizing tilapia. Two synthetic androgens, 17 $\alpha$ -methyl dihydrotestosterone (mestanolone) and 17 $\alpha$ -methyl testosterone, were evaluated at two concentrations, using 3-hour exposures at 10 and 13 days after fertilization. Results indicate that short-term immersion in 17 $\alpha$ -methyl dihydrotestosterone at a concentration of 500 $\mu$ g/l shortens the treatment period, thereby reducing possible worker exposure to anabolic steroids.