Because all animals have the capacity to learn through operant conditioning and other types of learning, zoos and other animal care facilities have shifted towards the utilization of positive reinforcement training to shape the behavior of animals in captivity. Training provides animals the choice to participate in their own husbandry routines and veterinary procedures. While the adoption of these practices has improved the welfare of animals in human care, it has not been applied equally across taxa. Snakes are often overlooked in the discussion of choice and control in a captive setting, likely due to the historical misinterpretation of their intelligence and needs. In general, there is an overall lack of documentation of reptile training. In this study, a shaping plan was developed for juvenile false water cobras (*Hydrodynastes gigas*), a rear-fanged venomous species. Using behavioral approximations, snakes were rewarded with food when completing behaviors related to the ultimate goal of willingly entering a shift container. At this point in the training process, all snakes have made significant progress towards reliably performing this behavior. The purpose of this project is to use the trained behaviors to allow for routine husbandry practices, such as enclosure cleaning and weighing, while preventing unnecessary stress in the snakes, as well as risk to the keeper.