FRUITS OF EDUCATION

## Training tips for animal tattooing

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**TABLE 1** | Evaluating competency in tattooing

As trainers, sometimes we observe a procedure and think, "How hard can that be? Looks easy enough." Animal tattooing seems to be one that can be taught and learned easily. One simply restrains the animal, picks up a tattoo gun already prepared with ink and injects the ink into the tissue. If only it were that easy!

Tattooing requires agility, patience and concentration. The ultimate objective is to create a lasting mark on the animal that is visible and distinct. But each tattoo machine, each animal, each hand and each circumstance is unique, which can present a challenge to a trainee. Here are some tips to use when training people to tattoo animals.

The trainee should first read the instruction manual for the tattoo machine he or she will be using. The manual may include a lot of detail, which can be daunting, so we suggest skimming it to identify the highlights, then returning later for a deeper reading to understand the finer nuances.

Next the trainee should become acquainted with the equipment. He or she should hold the tattoo machine in various hand positions for several minutes, about the same amount of time as it would take to do the tattoo, to become acquainted with the machine's weight. Some trainees may experience hand cramps. The trainer should turn the machine on because it will vibrate during operation. The trainee should be prepared to maintain a good grip and to hold the tattoo machine like a pencil, controlling it at the tip. Since many of us don't write by hand much anymore—we type instead this skill may need to be regained.

The trainee should now practice filling the needle. Trainers might consider using water instead of ink at first so that any

g	Task	Competency criteria
d	Filling of tattoo needle	Full, no air
	Proper holding of tattoo machine	Angle, relaxed
e	Tattoo visibility	Dark, easy to read
9-	Correct pressure	No blood or cuts
le	Animal preparation	Properly sedated, restrained, not stressed
	Station set-up	Clean, organized, all materials present
d	Post-procedure evaluation (immediate)	No artery, vein or nerve puncture
re	Post-procedure evaluation (2–3 days later)	No scabbing or bleeding

spills don't stain the training station and using absorbent pads on the training station surface. Once the needle is filled with ink, the trainee should practice using the machine to draw lines on a banana skin. We recommend using a yellow banana with some brown spots; green ones are too hard and brown ones are too soft. The trainee should learn how much pressure is needed to create clear lines without puncturing the skin or dispensing too much ink, but it's okay to make mistakes on the banana skin to learn what not to do. After each practice run, the banana can be wiped with a gauze pad to remove any extra ink that has dripped around the practice lines. The trainer should evaluate each attempt using defined competency criteria (Table 1).

When deemed competent using a model like a banana, the trainee may begin using live animals. The animal should be acclimated to being held or restrained, and the trainee should be comfortable with restraining the animal before attempting to tattoo in order to minimize stress and reduce the likelihood of the animal struggling. The room should be quiet and warm, and the lighting should be no brighter than needed for visibility.

We recommend trainees first practice tattooing the tail of a live mouse, marking straight lines across the tail. When the trainee has mastered tail tattooing, he or she can move on to tattooing the ear,

learning to avoid puncturing blood vessels	
and the thinner skin. Trainees should con-	
tinue to develop their holding technique	
and to learn how much pressure is needed.	
If too much pressure is used, the needle	
may be inserted too deep and damage the	
subcutaneous blood vessels and nerves;	
if too little pressure is used, the ink may	
be placed too shallow and the tattoo will	
slough off as the epidermal layer turns	
over. After developing more confidence	
and competence, the trainee can begin	
tattooing rabbit ears.	

As with the banana skin, each practice run with an animal should be evaluated using defined competency criteria (**Table 1**). The tattooed lines should be dark and easy to see. There should be no blood. The tattoo should be examined later in the day to confirm that there is no tissue damage and several more times over the next 2–3 days to confirm that the lines do not fade.

Finally, the training session should be documented as required by the institution.



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