

Marine Turtle Newsletter

A Suggested Modification of Tagging Pliers

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The unnecessary bruising of tissue when tagging sea turtles is undesirable because increased tag loss could occur and the behavior of the turtles might be adversely altered, especially while they are nesting, by an overly painful tagging experience. For example, if the behavior of a nesting turtle is modified by painful tagging, less soil might be deposited over the egg clutch, thereby changing incubation temperature and hatchling sex ratios. Other problems of tagging and tag retention have been discussed earlier (MTN 20:11-14).

Application of the National Band and Tag Company size 681 tag frequently results in severe pinching of tissue and pain (as evidenced by a sudden response) because of the small gap at the jaw tips of the tagging pliers when they are in the closed position. This tissue compression problem occurs when the thickness of the flipper exceeds the 4 mm gap between the jaw tips. For the Hawaiian green turtle, this commonly involves individuals approximately 50 cm or more in straight carapace length, depending on the exact tagging site.

Tagging pliers for the size 681 tag can be easily modified to eliminate or reduce this problem by grinding off the upper tip of the jaw, as shown in the accompanying diagram. The alteration does not seem to affect adversely the performance of the pliers in locking the tag properly. Over 200 turtles have now been tagged in Hawaii with modified tags. A similar modification may be possible on tagging pliers used with other tag types and sizes to avoid, unnecessary crushing of tissue. Of course, caution should be exercised as with any change of equipment or procedure until it can be determined that the modification fulfills the individual's specific research needs.

