

Figure 35. Histogram showing the total distribution of tooth size within one 90-kg bulk sample collection of 1410 teeth from the Cenomanian Woodbine Formation, Denton County.

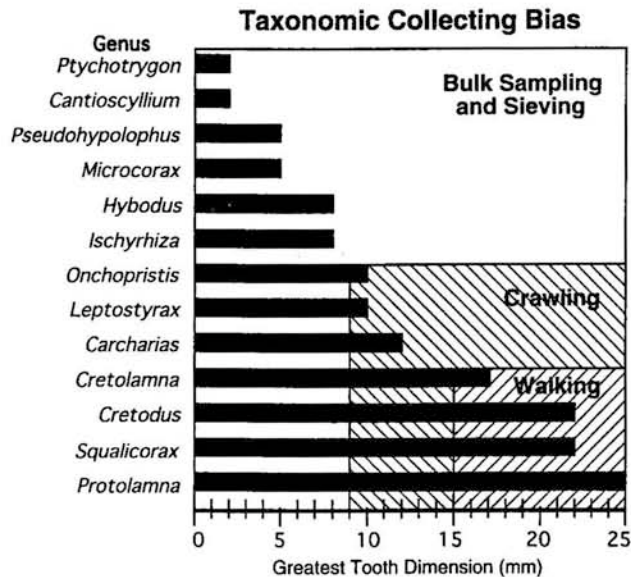


Figure 36. Histogram showing the tooth size distribution for each species in a 90-kg bulk sample of the Cenomanian Woodbine Formation, Denton County.

walking, is actually rare relative to other species when compared with the total bulk matrix assemblage.

The collecting style we recommend is to walk or crawl a selected exposure until teeth are spotted. Once found, check to see if the teeth are weathering

out of a specific layer. If so, concentrate your efforts here and collect along its lateral extent. This interval is also a prime candidate for bulk sampling or field sieving.

Collecting Equipment

Whenever you head into the field to collect fossils, you should always be well equipped. The last thing you want is to inadvertently damage a fossil because you didn't have the correct collecting tools. The equipment needed for collecting shark and ray teeth is easily obtained and relatively inexpensive. With more experience at specific collecting sites, you will select the appropriate tools. Improvisation and originality are the marks of an experienced collector!

Figure 37 provides a list of commonly used collecting equipment, grouped by activity and collecting method.

Locality Description and Field Notes

Taking good field notes and accurately describing the geologic context and location of your fossil discovery are necessary skills that will improve with practice. A field notebook for recording your observations should accompany you at all times. Acquire topographic maps of your collecting area and take these maps with you so that sites can be exactly located. A measuring tape will come in handy for determining bed thicknesses and for describing the geology and outcrop section. Photograph the locality if possible and include a print with your field notes or locality file. Finally, bring any geologic or paleontologic literature to the site or general area with you. Often, having this information available can help answer questions that are only resolvable at the outcrop. More about this in Chapter 8.

Plaster Casting

Placing a plaster-of-Paris cast or jacket around a fragile specimen is a widely used and reliable method to ensure the safe collection and transport of fossils. It might be difficult to justify casting an isolated