

# ATLATL WEIGHTS

## Function and Classification

by William R. "Atlatl Bob" Perkins

### INTRODUCTION

Atlatl weights, both known and suspected, are a fascinating and frustrating subject. Based solely on the misinterpretation and lack of understanding surrounding them, and their occurrence in the archaeological record, debate and confusion as to their purpose has set them apart from most other artifacts.

There are a variety of atlatl weight types and suspected types found, interestingly enough, mainly in the United States. Their distribution seems to be contained within the forty-eight states with a little overlap North into Canada, and south of the Rio Grand River into Mexico. But generally, the political boundaries of the lower 48 United States hold most of the world's atlatl weights. As far as I am aware, atlatl weights do not occur outside North America, although atlatls most certainly do. Atlatls in a variety of styles are found more or less world wide. The earliest examples date to well over 20,000 BP in Europe, and the atlatl is still used today by natives of Papua, New Guinea and the Australian aborigines. But regardless of where atlatls are found, nowhere other than North American are they found with weights attached to them.

The confusion surrounding atlatl weights begins with the many theories as to their purpose. The most popular of these seems to be that they are a counter balance. This theory suggests that the weight acts as an adjustment to balance the atlatl and dart in the palm of the hand. Many other theories have been put forth, mainly based on the idea that the attachment of the weight would propel the dart a greater distance.

Experimentation with many of these theories tended to show opposite results until finally the theory of last resort, "hunting magic" was applied. When all else fails, it's a charm, the owner believed the atlatl weight possessed "hunting magic." No doubt about it, some weights are quite beautiful and finely polished, and I am sure their owners even believed that they possessed magical power. That's just the way we humans are. We're weird like that. How ever, not all atlatl weights are beautiful. Many are rather crudely finished and some are merely rounded river rock. Even these could hold some special meaning to someone, but the "charm theory" just doesn't hold. Atlatl weights have a function, and that function has to do with their mass.

### WEIGHT THEORIES

This brings us to the contradiction in the term "atlatl weight". More often than not atlatl weights are referred to in every descriptive term imaginable except - mass. To apply the term 'weight' to an object and neglect to report its mass would seem illogical to a thinking human.

There is also the confusion of what is an atlatl weight. This is more of a word game than a question of function. Several descriptive and functional names have been applied to known and suspected atlatl weights. Depending upon where you live or how you became familiar with atlatl weights you might refer to all weights in general as Banner Stones, boat stones, counter weights, bird stones, etc. This causes a great deal of confusion. Not long ago I was asking a friend of mine who lives in the East some questions on Banner Stones. Our discussion, became quite confused until we realized that I was talking about a very particular type of atlatl weight and he was trying to give me answers for atlatl weights in general.

The center of all this confusion lies with the dispute over the true purpose of the atlatl weight. In my studies of the atlatl and dart I have found that they possess a deceptively advanced technology. The basic technology, the mechanical foundation of the system, is the flexible dart. Over time, humans have tinkered and toyed with the system improving and refining it to a very high degree. There are many levels of technology which have evolved from the basic mechanical foundation. Just as modern rifles evolved from muzzleloaders, to breach loaders, to lever actions to automatics, atlatl weights in general represent one very advanced level of atlatl and dart system technology. In fact, some weight types represent a higher degree of technology than others, a technology within a technology.

So how is the system improved by the application of a weight? Atlatl weights possess mass and when attached to an atlatl that mass affects the system. But contrary to popular experimentation you just can't strap a weight onto any old atlatl and expect a miracle. Atlatl weights do not possess a sufficient enough mass to significantly influence the speed at which an atlatl is swung in order to affect some degree of timing based on velocity. The fact that a weight increases the moment of inertia of an atlatl is just that, a fact. What good does it do? Why not make a thicker atlatl? And as far as a counter balance is concerned, that theory only applies when the atlatl and dart are at rest and not being used. The total system of atlatl and dart, with or without a weight, is fairly light.