

ANABAT Measurements Key

- N** The number of calls analyzed among those displayed on the graphics screen
- S_T** The time (ms) from the start of the file to the first call analyzed
- S_I** The initial slope (octaves/s; OPS). This is actually the steepest slope over the first five points in the call.
- S_C** The Characteristic Slope (OPS) is the slope of the flattest part of the call, in most situations. It is really the slope of the more or less straight section leading up to the point at which the Characteristic Frequency is calculated.
- Q_U** This is a measurement of the Quality of the calls, the higher the number, the worse the quality.
- F_{MAX}** The Maximum Frequency (kHz) is the highest frequency of the call.
- F_{MIN}** The Minimum Frequency (kHz) is the lowest frequency of the call.
- F_{MEAN}** The Mean Frequency (kHz) is the area under the curve divided by the duration. It is a weighted mean and not just the average of the frequencies of the dots. It takes into account that the dots are more widely spaced at lower frequencies. It is easier and more reliable to calculate than Characteristic Frequency, but is inherently more variable.
- F_C** The Characteristic Frequency (kHz) is the frequency at the end, in time, of the body or flattest portion of the call.
- F_K** The Frequency of the Knee (kHz) is the point at which the slope abruptly changes from the steep, initial downsweep to the flatter portion (Body) of the call. Obviously, not all calls have a recognizable Knee. In the case of a gently curved call, the Knee is basically undefined. In this instance, the Body should be taken as the flattest portion of the call, which may be just a very short segment. By default, the Knee will always be the point at the start of the Body. In the case of a straight call, the Knee will be at the very start, and the Body will occupy the whole call. In the case of a "J" shaped call, the Body could be defined as the flat part of the call at the bottom of the "J", in which case the Knee and Characteristic Frequency will be the same. It also could be applied to a straight section of the call that precedes an abrupt angle change at the bottom of the "J". In which case, the call is seen as a linear or bilinear call with a brief upsweep at the end. It will not always be obvious which of these options makes more sense.
- DUR** The total Duration of the call (ms).
- TBC** The Time Between Calls (ms) is measured from the start of one call to the start of the next.

N_{TBC} The number of intervals which were used in the calculation of the TBC parameter, one less than N. Obviously, no TBC can be calculated with a single call.

T_C The time (ms) from the start of the call to the point at which F_C is measured (i.e., to the end of the Body).

T_K The time (ms) from the start of the call to the point at which F_K is measured (i.e., to the start of the Body).

Q_K This parameter attempts to quantify the Quality of the Knee. The premise is that the larger the number, the more sharply defined the Knee. This is a questionable measure and little reliance should be placed on it at present.

S_T This is the starting position of the call within the file. It allows the ability to find that particular call by looking at the S_T parameter on the bottom line of the ANALOOK screen. It is not a time interval, but roughly corresponds to the number of points from the start of the file.

Change in Slope

In some cases, an examination of the change in slope for a sequence of calls can assist in determining species. This is not a panacea for solving all identity problems but can be a valuable tool to help in discriminating certain species. The change in slope split screen will stress the minimum slope achieved at the body and will provide criteria helpful in making identification.