

Abstract Submitted
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Compound Bow Efficiency JOSEPH WATSON, McMurry University

— The goal of this project was to determine what affects the efficiency of a compound bow. Some general factors could have been draw weight, draw length, cam shape, let-off percentage, arrow weight, arrow spine, and string silencers. The efficiency of a compound bow was measured using several sets of variables and constants to determine relationships for these efficiency factors. It was discovered that draw length and arrow spine do not affect efficiency. Efficiency increases with increased arrow weight, and increases as a bow approaches its peak draw weight. Efficiency decreases as string silencers, or generally speaking weight is added to a bow's string.

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