

CUSTOM BUILT 1975 B25 FN BROWNING WITH ENGRAVING BY GIACOMO FAUSTI.  
(PICTURE BY BRIAN DUNN)



# SHELL CHOICE TO TAME THE BATTUE

BY TIM WOODHOUSE

**B**attues can be a cause for concern for many. The mere thought of taking on these fast and elusive targets appears to instill a negative phobia in most shooters. In mitigation, it must be said that the battue's unique flight and twisting display can outfox even the most determined of shooters, with the visible part of the target varying from what appears to be an ultra thin 'edge on' disc to a full 'face on' target.

The flat nature of this target greatly reduces its lift generating capabilities and its ability to maintain height, but also allows it to retain a greater part of its initial launching speed for longer. The bottom line then, is that the battue can generally be going faster than it might first appear. So, key to success with this particular target is to watch its flight carefully before taking the stand. Speed and trajectory must be established,

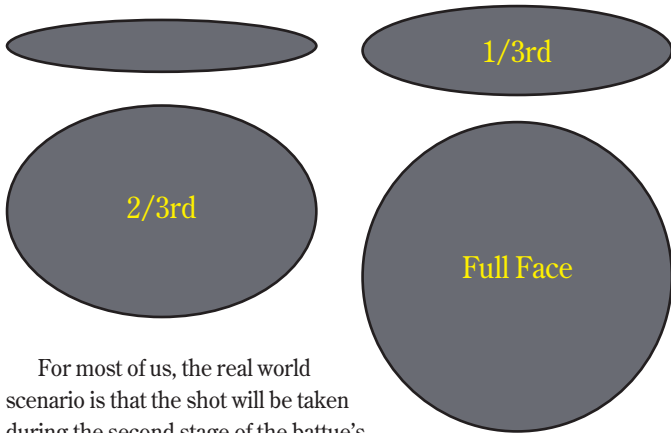
along with the most advantageous place to take the shot.

Actual target displays can and do vary considerably, but a typical battue can be thrown directly across the shooter's position (crossing), or at a quartering angle, so that its path runs at a smaller angle across the shooting position. When quartering the flight line can be both outgoing or incoming. The upside is that crossing battues will be traversing the shot string to

some extent throughout their flight. The downside is that generally speaking, the longer a shooter waits to take the shot after a battue has displayed its full 'face', the more difficult it will become as it loses height rapidly, due to the accelerated drop of the target. This is definitely something to consider – as increased lead underneath it will be needed, probably around twice that of similar circumstances for a regular clay target.

## Target Areas

In the first stage of the battue's flight, the target is almost 'edge on', not exactly the preferred option as it has the smallest visible target area available to the shooter. A densely populated pattern is mandatory to ensure a reliable hit.



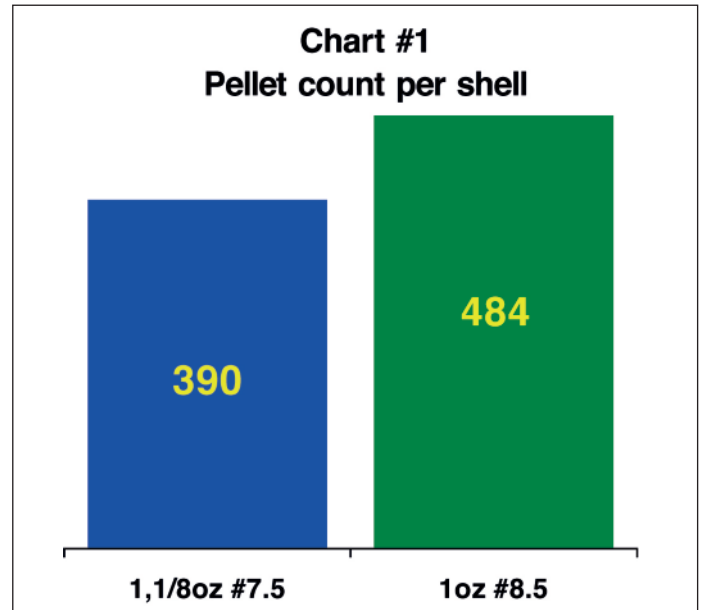
For most of us, the real world scenario is that the shot will be taken during the second stage of the battue's flight. This is more within the middle ground, further along the flight line as the battue starts to perform its turning routine. When the battue has rotated into its full 'face on' mode and is crossing directly in front of the shooter it offers its largest target area – but is often much further along its flight line.

With a quartering situation, the battue will still be technically 'face on', but the actual amount of its visible area will depend on the angle of its flight when compared to the shooting position. It will appear as more of an elliptical shape with a correspondingly reduced visible area. The further away the flight line is, the narrower will be the visible area. Hitting a 45 degree incoming battue can be especially tricky, as it will be dropping rapidly as well as having a reduced visible target area.

## Shell Choices

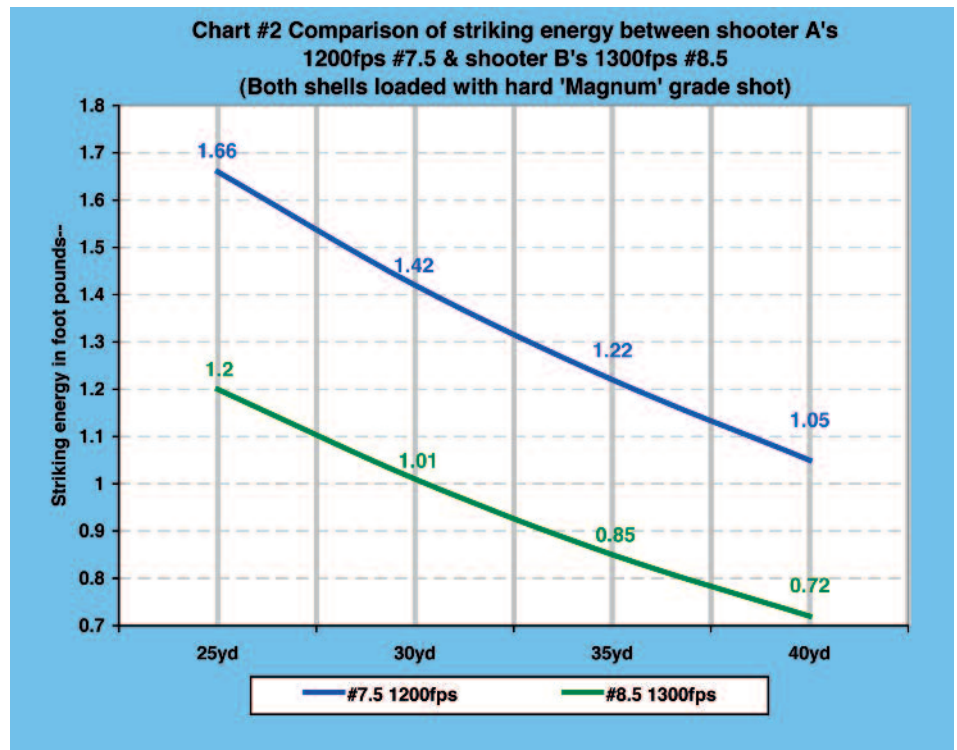
Let's look at two shooters who have quite different ideas about the best shell to cope with battue targets. **Shooter A** uses a regular 1200fps 1 1/8oz loading of #7.5 shot (with a nominal 390 pellets). **Shooter B** uses a fast 1300fps International 1oz load of #8.5 shot (with a nominal 484 pellets).

As shown in Chart #1, the 1oz International load of #8.5s has 94 pellets (just over 24%) more than the heavier 1 1/8oz of #7.5. So, the lighter and faster International load of #8.5 shot has all of the numbers, allowing a more relaxed control of the overall pattern spread to **Shooter B's** advantage, but with a more limited maximum range regarding individual pellet striking energy.



## Striking Energy

Are there issues with pellet striking energy and therefore downrange breaking power with the smaller shot size? The actual amount of striking energy required to break a battue can and does vary considerably, depending on its angle of display at the moment of impact by the pellets. An outgoing quartering target needs a striking energy level somewhere between a right-angled crossing target and a straight away outgoing variety. Because of the extreme variability of the battue during its flight, it



is extremely hard to establish the minimum striking energy requirement.

With reference to Chart #2, would **Shooter B's** load having 1.01ft/lbs of striking energy at 30yards (for those #8.5 pellets remaining in good condition), be the better choice with its higher potential number of strikes and or more relaxed choke requirement at this distance? From 25 to 30 yards, if the battue is showing 2/3rd to 1/3rd of its face (and based on considerable experience) it would appear that a multiple strike of 1300fps #8.5 pellets may be equal to the task – especially if the target is incoming. Pellet tendency to ricochet off of the battue would be undeniably higher than with the larger #7.5 pellets (dependent on the angle and attitude at the moment of impact).

If the battue is close to 'edge on' at 40 yards, the larger #7.5 pellets would have the extra punch for a more reliable break (1.05ft/lbs), but would a much tighter control of the pattern be required? We can see from Chart #2 that the #8.5 pellets have virtually the same power levels at 30 yards as the #7.5 at 40 yards

## Pattern and Chokes

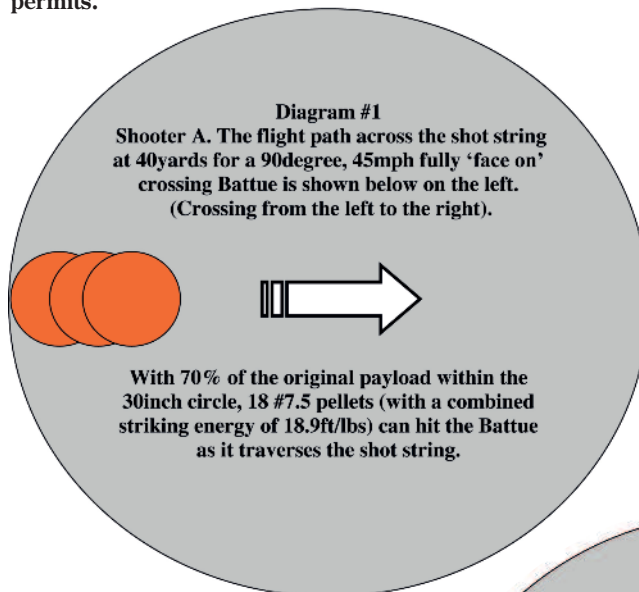
Having sufficient pellet striking energy to ensure a reliable target break is one thing, but this is dependent on having a pattern distribution and density that is actually going to be able to hit the target. As all likely battue scenarios will be crossing the shooting position in one way or another (whether crossing, incoming or outgoing) the effect of the shot string must be considered.

The number of pellet strikes depends on the length and velocity

of the shot string and residual speed of the target. The actual placement of the shot string in relation to the timing and flight of the battue is also relevant.

Multiple pellet strikes within the shot string can generate a shock effect upon the target – in addition to the breaking power of the individual pellet striking energy. But, at some point, the individual striking energy of the pellets takes priority.

**The following data looks at averaged likely best-case scenarios, but these can vary up or down as the probability of actual pellet placement permits.**



**Shooter A: 1 1/8 oz #7.5 @ 1200fps**  
Full choke performance at 40 yards, with a 90 degree 45mph (66fps) battue.

Fully 'face on'. With a typical 6 foot long shot string, the battue can at best travel 8 inches across the shot string and be hit at the most by 18 pellets (with a combined striking energy of 18.9ft/lbs). If instead, the battue is shown almost edge on, this is reduced to 3 pellets (with a combined striking energy of 3.15ft/lbs).

If **Shooter A** chooses a Modified pattern performance at 40 yards, with 60% of the #7.5 pellets within the 30 inch circle, these pellet-striking figures are reduced to: 15.5 pellets (total of 16.27ft/lbs) for a 'face on' battue and 2.5 pellets (total of 2.62ft/lbs) for an 'edge on' battue.

Modified performance at 35 yards (71%) will be more or less similar to the Full Choke figures at 40 yards.

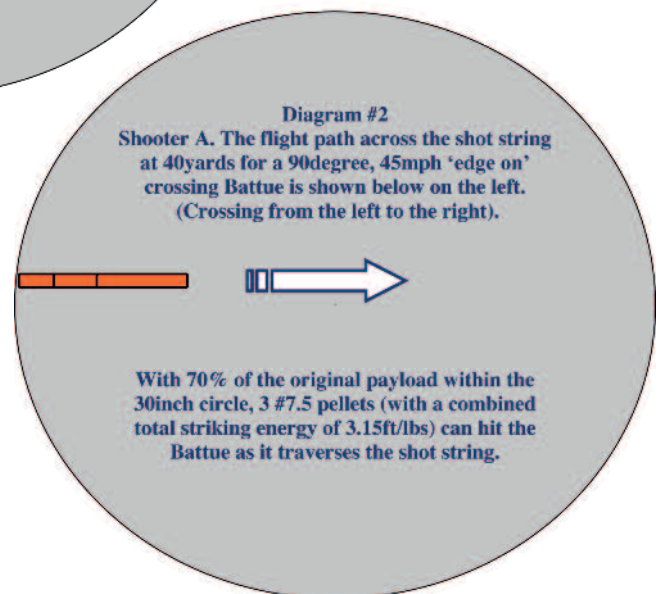
The individual #7.5 pellet striking energy will be up to 1.22ft/lbs, but the shorter shot string will reduce the pellet numbers to around 16.2 (total of

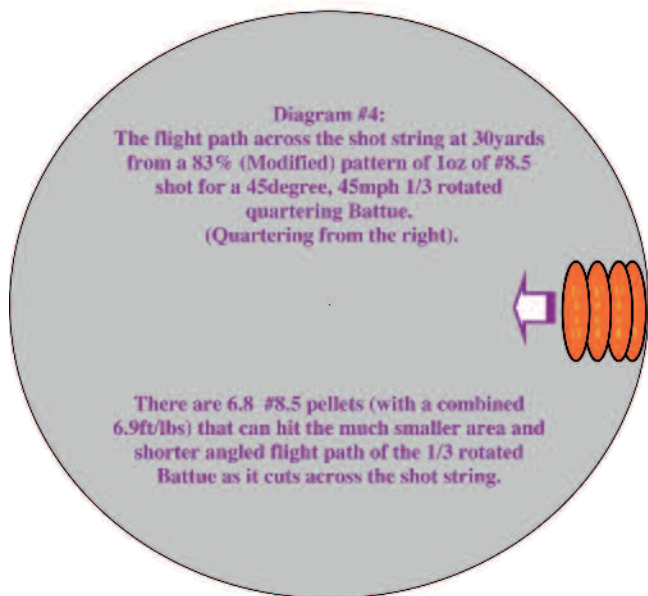
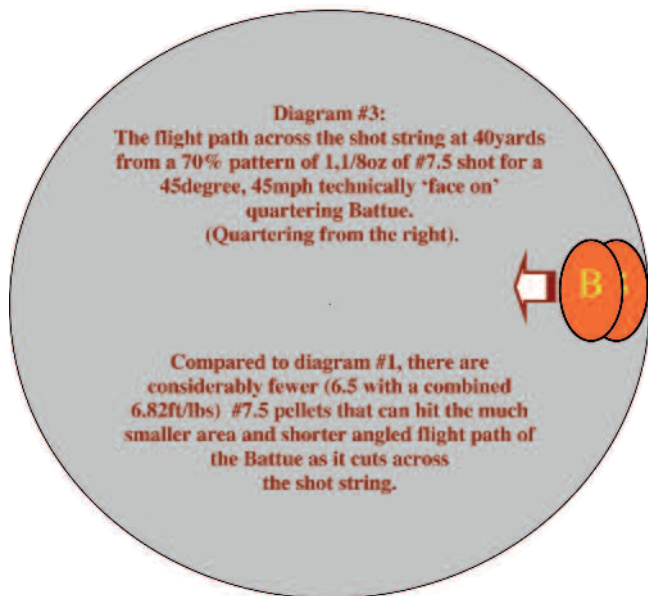
19.76ft/lbs) and 2.7 (total of 3.29ft/lbs) pellets respectively.

Modified makes a great deal of sense at 30 yards with 83% of the #7.5 pellets within the 30inch circle, with the striking energy now up to 1.42ft/lbs. With further adjustment for a still shorter shot string than at 35 yards, the pellet striking numbers may be around 17 (total of 24ft/lbs) for 'face on' and 2.8 (total of 4ft/lbs) for 'edge on'.

**Shooter B: 1oz #8.5 @ 1300fps**  
The #8.5 pellets have similar striking energy levels (1.01ft/lbs) at 30 yards as the #7.5s at 40 yards. With greater pellet numbers in the loading (484) and allowances for reduced strikes caused by a shorter shot string, a Modified choke performance will increase pellet strike to numbers: 21.5 (total of 21.7ft/lbs) for 'face on' and 3.6 (total of 3.6ft/lbs) for 'edge on'.

At 35 yards the striking energy of the #8.5 pellets has dropped off to 0.85ft/lbs, probably fine for a 'face on' target with a multiple strike (20.4 pellets with a total of 17.3ft/lbs), but might be marginal for an 'edge on' battue (3.3 pellets with a total of 2.8ft/lbs).





With quartering battues, both incoming and outgoing, due consideration must be made of both their reduced visible area and their shorter path across the shot string.

Diagram #3 shows a 45mph, 45 degree quartering battue that only travels half the distance across the shot string compared with a 90 degree crossing target and with a greatly reduced visible target area, reducing pellet strikes to 6.5 from the 18 in Diagram #1.

## Conclusion

- Battues can be tough cookies, but informed shell choices can deliver consistently. Why not take onto the station a secondary shell choice back up – just in case.
- Reading the battue's flight path is essential, so that a realistic hitting point can be arrived at within the ability of the shooter and his choice of shell.
- At 40 yards Modified and or up to Full choke performance and 1<sup>1</sup>/<sub>8</sub>oz of #7.5s @ 1200fps is the best choice for both edge on and quartering battues.
- Fully face on crossing battues are easier to break by virtue of higher numbers of pellet strikes.
- At 30 yards a Modified pattern of #8.5s @ 1300fps can deliver for all types of battue.
- At 35 yards, a 1oz 1300fps loading of #8s might make a better overall choice (with 1.08ft/lbs of striking energy).
- When using self-loaders on a station where there is a longer range battue and a closer standard target released on report, a softer chilled shot loading should be utilized for a wider effective spread through the same choke. ■

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