

**Performance of No Man's Land 20 gauge
Number 1 Plated buckshot (8 pellet)
in Bare 10-percent ballistic gelatin**

Brass Fetcher Ballistic Testing

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Summary

| | Shot 1 | Shot 2 | Shot 3 |
|---|--------|--------|--------|
| Calibration depth (Inches, corrected to 590 ft/sec impact velocity) (Ideal gelatin block penetration depth = 3.4") | 3.6 | | |
| | | | |
| Impact velocity (Measured at 7ft) (ft/sec) | 1247 | | |
| | | | |
| Median Penetration Depth (inch) | 15.2 | | |
| | | | |

Notes :

Weapon – Mossberg 20 gauge *Model 500*; 18.5" barrel length, cylinder choke

Distance – 10.0 feet, muzzle to impact face

Shot 1

| Block Calibration Velocity (ft/sec) | Block Calibration Depth (inch) | Block Calibration Temperature (Degrees Fahrenheit) | Block Core Temperature (Degrees Fahrenheit) |
|--|--------------------------------------|--|--|
| 580 | 3.8 | 42.7 | 41.8 |

| Impact Velocity (ft/sec) | Deepest Penetration Depth (inch) | Maximum Crack Diameter (inch) | Maximum Crack Diameter Location (inch) |
|-----------------------------|-------------------------------------|----------------------------------|---|
| 1247 | 16.0 | 4.0 | 3.6 |

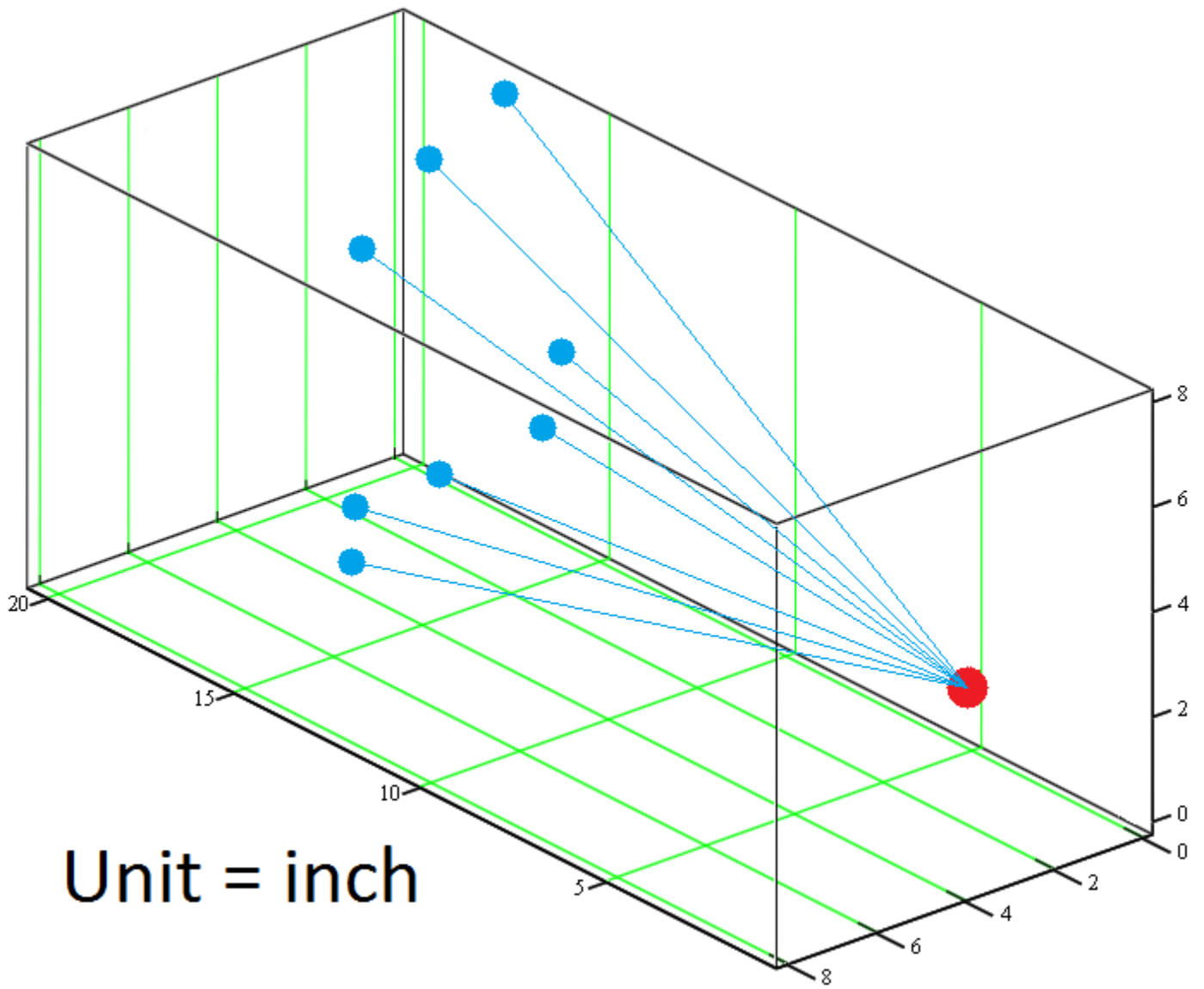
| Cavitation Depth (inch) | Pellets Recovered Independent of the primary cavity (quantity) | Pellet Combined Surface Area Independent of the primary cavity (square inch) |
|----------------------------|--|--|
| 11.4 | 8 | 0.566 |

Test site conditions – 69 degrees Fahrenheit, 81% relative humidity

Time out of refrigeration prior to shot impact – 4 minutes

3-dimensional visualization of fragment penetration

Figure 1.



Individual fragment penetration depths

| Pellet number | Straight-line pellet penetration depth (inch) | Total distance traveled (inch) |
|---------------|--|-----------------------------------|
| 1 | 13.9 | 14.0 |
| 2 | 15.1 | 15.4 |
| 3 | 15.0 | 15.5 |
| 4 | 15.1 | 15.5 |
| 5 | 15.3 | 15.6 |
| 6 | 15.3 | 15.8 |
| 7 | 15.6 | 15.9 |
| 8 | 16.0 | 16.7 |

Figure 2. Side view of **Shot 1** gelatin block



Figure 3. Top view of **Shot 1** gelatin block

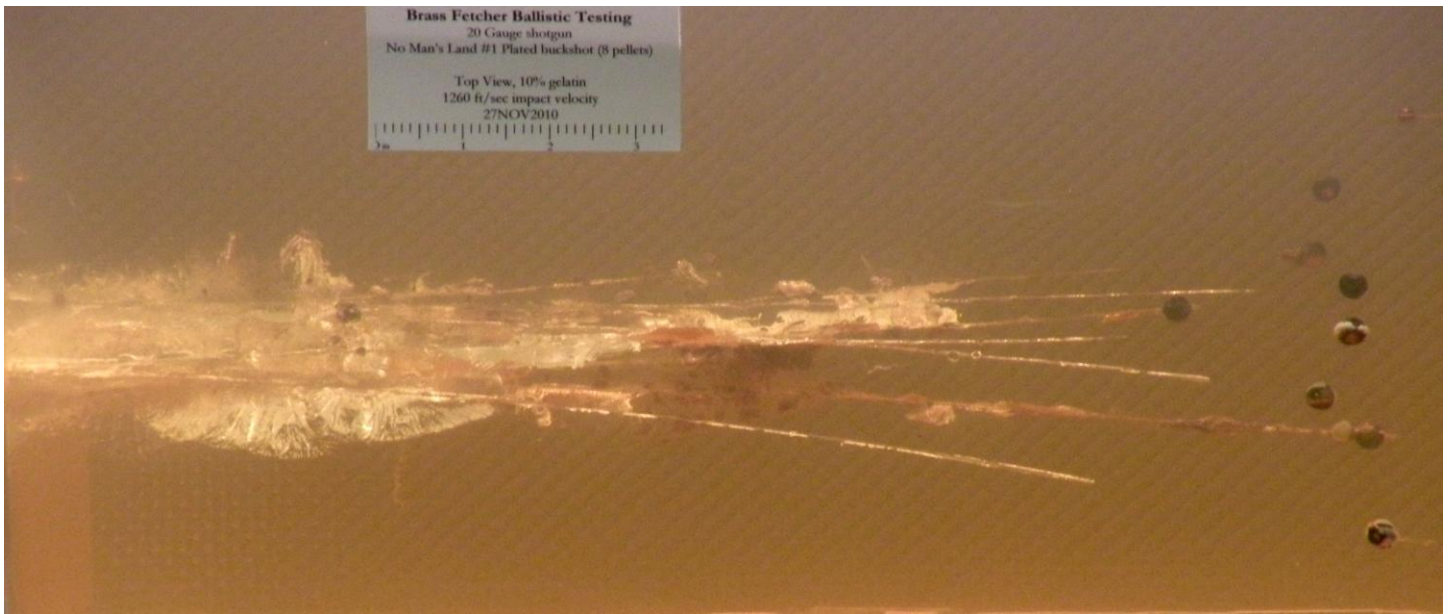


Figure 4. Fragment view of **Shot 1** recovered shot pellets

