The Value of An Artery Clamp To Dehorn Cattle
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A preliminary trail involving use of an artery clamp and a drawing and description of the clamp are reported in Bulletin 507.

This trial involved 42 horned heifers owned and fed by a cooperating feedlot operator. The heifers were individually weighed and placed on these experimental treatments:

- 1. Control not dehorned
- 2. Dehorned using clamp; arteries pulled
- 3. Dehorned not using clamp; arteries pulled

All heifers were placed in one large lot and fed the same ration for 30 days after being dehorned.

Results

Weight gain results are in table 32. Heifers not dehorned gained the most which agrees with last year's trial. Heifers dehorned using the clamp gained slightly more than those dehorned not using the clamp; however, none of the differences in weight gain were significant, which is in agreement with last year's experiment. Differences this year were much smaller, which indicates that weight gain differences probably disappear as feeding pro-

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gresses (22 days in 1966 and 30 in 1967). The major arteries were pulled from each heifer that was dehorned.

Arteries were pulled about 10 seconds faster using the clamp. The clamp also made it easier to find the arteries so blood spurting was completely eliminated.

Best results are obtained on thin yearling cattle and close dehorning is necessary to sufficiently expose the arteries to be pulled.

The greatest advantage of a clamp appears to be reduced stress on animals and operators. The pressure of the clamp seems to reduce an animal's pain and prevents an operator from being covered with blood. When a bleeder is found, the clamp can be left on until the bleeding stops.

During the trial the heifers received 8 pounds of rolled sorghum grain, 25 pounds corn silage, 1.5 pounds of 42% protein supplement and 15 mg. stilbestrol per head daily.

Table 32
Weight Gain and Time Required to Pull Arteries
From Yearling Heifers as Influenced by
Use of an Artery Clamp When Dehorning

| | Treatment | | |
|--|--------------------------|---------------------------------------|---|
| | Control, not dehorned | Dehorned using clamp; arteries pulled | Dehorned not using clamp; arteries pulled |
| No. heifers | 14 | 14 | 121 |
| Initial wt., lbs. Dec. 27, 1967 | 490 | 483 | 487 |
| Final wt., lbs. Jan. 26, 1968 | 572 | 561 | 563 |
| Av. total gn. lbs | 82 | 78 | 76 |
| Av. daily gn. lbs | 2.73 | 2.60 | 2.52 |
| Time required to pull arteries, seconds, average | re . | 30.3 | 41.2 |

¹ Two animals removed due to injury