

## Overview of Animal Tracking Equipment

Equipment Type	Description	Cost
<b>Ear Tag</b>	<ul style="list-style-type: none"> <li>Read and manually record number along with date, location and other information.</li> <li>Pros: Inexpensive; don't require technology to use.</li> <li>Cons: Tags are difficult to use with some types of livestock (pigs); requires manual recording of location data which can be unreliable or tampered.</li> </ul>	<b>Less than \$1 / tag.</b>
<b>Electronic ID, EID or RFID Transponder Tag</b>	<ul style="list-style-type: none"> <li>Attached to the ear as part of an ear tag, or alternately can be inserted under an animal's hide, or, in the case of cows may be swallowed and remain in the animal's stomach.</li> <li>Transmit radio frequency data including location data, read and recorded by a RFID reader.</li> <li>Data from the reader can be downloaded and shared using a computer or smart phone app.</li> <li>Pros: Can record GPS data at the location where a reading is taken; more tamper-proof for recording location data; some systems may allow a certifier to review location readings online.</li> <li>Cons: Tags are difficult to use with some types of livestock (pigs); requires an RFID reader and software to operate; location data must be manually collected using an RFID reader; costs associated with reader and software may require a subscription for ongoing use.</li> </ul>	<p>FDX EID &amp; Matched Numbered Ear Tag: <b>Less than \$3.50 / tag</b></p> <p><b>*Requires RFID Reader. Lowest Cost Option is LPR Livestock Pocket Reader – approximately \$345.</b></p> <p>Reader data from scanned EID tags can be downloaded to a PC/Windows computer via the Allflex software that's included with the reader, or to Apple products using the Cattle Tags app. Device can store up to 3,000 EID tag numbers. Operates with an internal rechargeable battery.</p>
<b>GPS Tracking Collars</b>	<ul style="list-style-type: none"> <li>Provide real-time and historical tracking and monitoring</li> <li>Limited battery life</li> <li>Appear to only be currently available as a collar attachment.</li> <li>Pros: Provides real-time location data; some systems may allow a certifier to review location readings online; some systems allow for geofencing; collars may be considered more humane than ear tags</li> <li>Cons: Collars can easily be removed from an animal, collars are very expensive, collars require batteries to operate.</li> </ul>	Current technology is cost prohibitive.

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