

## **Microchip Identification Technology: How It Is Helping the Ostrich Farmer**

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For hundreds of years, animal identification has been important to the farmer. Historically farmers have had to prove ownership in order to sell or barter for animals. They have depended upon good fences and hot brands to maintain control over their livestock, and it was commonly understood that "possession was nine-tenths of the law." Although the crimes of horse thievery or cattle rustling were punishable by death, the farmer still had to prove ownership to reclaim his animals. Until the industrial age overwhelmed our country, a man's worth was often determined by the number of farm animals he owned.

Today's farmers have discovered that a new device called the microchip offers them a permanent solution to an age-old problem. Increasingly, the world has turned to the safe injectable microchip as a means of reliable identification. The ostrich industry is no exception and is in fact one of the largest users of microchips today. This reliance upon the tiny identification chip began in the late 1980's when the new American ostrich industry was faced with a dilemma. Thousands of chicks were hatching with almost identical physical characteristics, making it impossible to distinguish one from the other. Farmers tried every traditional method of marking their birds. Hot brands were too painful and destructive, freeze brands faded, external tag and legbands could be removed and tattoos were impractical. The timely emergence of a new electronic identification system -- the injectable microchip -- proved a safe, simple and final solution. The ostrich farming industry quickly took advantage of the many benefits of "microchipping," and big birds began to carry permanent unalterable, registered identification.

### **How the Microchip Makes Life Easier for the Ostrich Farmer**

Current management practices in the United States direct that chicks be grouped according to age and size as opposed to relatedness. This means that on a typical farm with multiple hens, the chicks are not grouped according to the hen that laid them but according to when they were hatched. However, since it is important that accurate records be kept regarding family histories, some form of definite identification becomes essential. Unfortunately, all of the conventional means of external identification have drawbacks with these fast-growing chicks. It is easy to see why ostrich farmers found an ally in microchip identification.

Chicks are implanted in the enlarged "pipping" muscle located on the back of the head. This procedure is performed routinely on most farms when the chicks are one to two days old. As his flock population fluctuates, the farmer can keep track of breeder birds, chicks hatched, birds sold, birds bought, birds that die and other vital changes. As a farm increases in size, the use of records becomes essential to track these birds and to document sales and purchases. Microchips provide a standard and consistent

method for bird identification to use for this tracking. Because microchip numbers are permanent, unique and unalterable and because they work well with all of the available farm computer programs, they are an ideal tool for improved farm management.

### **Veterinarians Rely on "The Chip"**

The reliable microchip is particularly important to the veterinarian whose practice includes ostrich and other ratites. Microchips are used so extensively in the various ratite industries that virtually all veterinary practices working with these species possess readers and microchips to be used as needed. Medical records, health certificates, physical examinations, pre-purchase examinations and insurance examinations are only some of the situations in which veterinarians crucially depend upon the implanted microchip for positive identification. Veterinarians are held accountable for certain procedures such as health and physical conformation guarantees, as well as gender determinations. Should there be a discrepancy or dispute concerning one of these medical decisions made by the veterinarian, this identification method assures that the bird whose condition is questioned is actually the same one that was originally examined.

The animal health departments in certain states require that any ostrich residing in/or traveling into or out of that state be microchipped. Documents such as health certificates, specific laboratory tests and insurance exams rely upon microchips, and therefore often require that they be the form of identification for the referenced animal. It is the veterinarian who performs these tests and signs his name to the required documents. It is the microchip that, by its mere presence, supports or denies the work of the veterinarian.

In similar circumstances, the research veterinarian depends upon microchips to document his findings. Many universities have ratite research grants in which such things as feed, reproduction, disease and genetics are studied. Microchips offer the consistent, permanent identification needed for studying great numbers of birds.

### **Insurance Companies Usually Require a Microchip**

Microchip identification technology found its way into the insurance community soon after its arrival in the ostrich industry. Permanent, accurate and unalterable identification is of the utmost importance when issuing mortality insurance policies, some of which exceed \$50,000 per bird.

Today's livestock insurers require that a bird be microchipped, that a veterinarian verify the fact and sign a veterinary certificate before an insurance policy is issued. If a claim is made, the insurance company will require a veterinarian to read the chip (and in many cases require that the actual chip be sent to them) before the claim is paid. Very simply, permanent microchips have given livestock insurers a perfect solution to the problem of insurance fraud. An additional benefit to these companies is that it can be quickly and easily determined whether or not a bird is stolen before it is insured.

### **Ostrich Theft vs. the Tiny Chip**

During the 1990's, several million dollars worth of birds were stolen in this country. Many states reported fraud, too, at alarming rates. These threats were perhaps the single biggest motivator behind the almost mass movement of the ratite industry toward the use of microchip identification. The fear of having livestock and livelihood stolen out from under them impelled farmers to give their animals the simple injection that would prove ownership.

As law enforcement agencies became aware of the small, injectable "serial number," they were able to move more quickly. The existence of the microchip gave them the substance and probable cause they needed to initiate searches. Repeatedly, thieves were caught and sent to jail for having in their possession microchipped birds that had been reported stolen.

In 1993 alone, over two million dollars worth of stolen birds were confiscated and returned to rightful owners after microchips confirmed identification. Currently, there are several pending state and federal cases which involve stolen ostriches. The success in retrieving stolen birds has successfully deterred thieves and has set an example prompting other livestock industries to utilize microchips for the same reasons.

### **The Future**

Tiny electronic microchips have played a vital role in the development of the ostrich industry. Their usage has been the basis for establishing guidelines for fair trade, progressive farm management and veterinary procedures. The problem of theft has been greatly curtailed as thieves recognized that the big birds were "chipped" for protection. Fraudulent deals have also waned as buyers request that the microchip be read before any money changes hands.

As our industry moves into the commercial processing market, microchips will play a very important role. Farmers and co-ops who are carefully documenting pounds of meat produced by slaughter birds can follow their birds through the process by cross-referencing the microchip number with the slaughter number. By doing so, farmers who have always used chip numbers to document parentage and genetics will now be able to initiate cull programs and plan future purchases to increase flock production. Keeping track of high producers and knowing which breeder birds are producing the most commercially viable chicks will be an easy task with a microchip system already in place. As more and more birds come up for processing, new ways of identifying them will become available. AVID® is introducing an external microchip tag that can be utilized for slaughter birds. It will be placed on a chick at hatch and stay with the bird as it grows, allowing the farmer to still use his reader to identify his birds. These new tags carry an embedded chip and can be reused. For more information, contact the office of AVID® Microchip Identification Systems at (800) 434-2843.