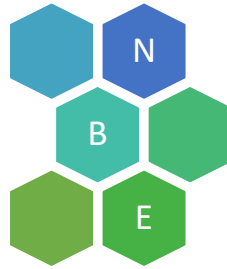


# NORM

Naturalistic Ostrich Rearing & Management



## What is NORM?

NORM is an operating framework that delivers ethical, profitable, and environmentally responsible Ostrich farming by supporting natural systems. Healthy, happy birds lay more viable eggs, produce healthier hatchlings, and encounter fewer health problems which drives farm yield; we call this philosophy Naturalistic Ostrich Rearing and Management. NORM identifies three primary domains that encompass known nutritional, behavioral, and environmental factors to optimize Ostrich health.

## Defining the NORM control framework

Control objectives are core components of holistic ostrich health. These objectives are divided into three welfare domains; Nutritional, Behavioral, and Environmental Controls. Each domain requires one or more control protocols that align with business objectives and constraints to achieve farm goals. The NORM operating framework is a nexus of control protocols that continually evaluate production performance metrics to achieve humane husbandry, environmental stewardship, and profitable operations.

## Control Objectives:

### Nutritional factors

- Trace Mineral Support
- Amino Acid support
- Retinol/Carotenoid support
- Antioxidant support
- NDF/Carbohydrate balance
- Energy Sources
- Gut Microflora
- Water Conservation

### Behavioral Factors

- Cohort Socialization
- Stimulation
- Feed Identification
- Grazing Behavior
- Handler Socialization
- Nesting & Grooming
- Vigilance
- Seasonal Depletion
- Exercise & Vigor

### Environmental factors

- Water Conservation
- Hydrated Forage
- Captive stress
- Transport stress
- Shelter
- Oviposition
- Camp density
- Artificial incubation
- Identification
- Capture & Restraint
- Visual Perimeter
- Biosecurity
- Photoperiod
- Humidity

## Control Protocols

Control objectives are achieved through implementation and continuous improvement of Control Protocols. Control Objectives are common factors that promote Ostrich health, and Control Protocols are the specific controls that are used to mitigate operating and environmental constraints unique to a particular farm. Defining and implementing protocols that support the Control Objectives improves ostrich health and farm productivity.

## Putting it all together

Conventional farming techniques optimize farm profitability by reducing inputs to the absolute minimum required for baseline animal health. NORM optimizes farm productivity by supporting nutritional, behavioral, and environmental factors unique to ostrich ecology. The result is an Extensive farming model that improves operating performance by supporting holistic health. This framework of objectives and controls provides a foundation that informs farm operating decisions to promote animal health and operating profit.

