

# 4th National Beef Conference

## 第四届全国肉牛生产 应用技术与经济研讨会

- Daily management to prevent metabolic disease and increase profit
- 运用日常管理来预防代谢性疾病并增加利润

Mark Lohner

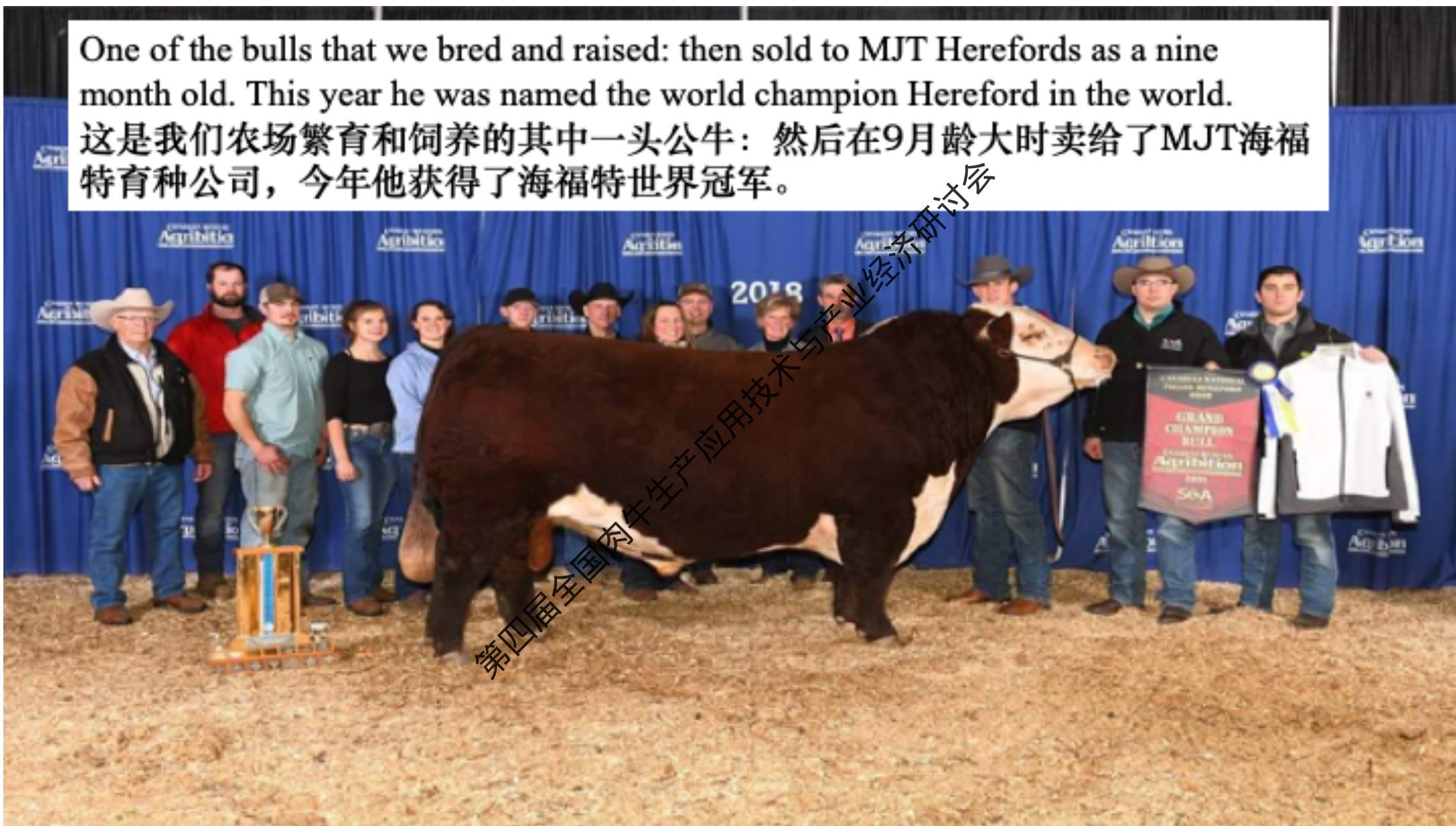


## Brief introduction 简介

- Own a 200 cow ranch in western Canada running both purebred herefords for seedstock and commercial cows
- 在加拿大西部拥有一个200头成母牛的育犊母牛场，外卖纯种海福特种畜和商业母牛。
- Use a extensive AI and ET program to boost the genetics
- 广泛使用人工繁育和胚胎移植来增强基因。
- Have spent over 30 years in the feedlot business including the last 3.5 years here in China with Muhejia Livestock and starting now as well with the China Canada Beef Alliance
- 已经在肥育场中工作了30多年的时间，包括过去三年半来了中国这里在牧合家畜牧工作，现在也开始加入了中加肉牛联盟中。

One of the bulls that we bred and raised: then sold to MJT Herefords as a nine month old. This year he was named the world champion Hereford in the world.

这是我们农场繁育和饲养的其中一头公牛：然后在9月龄大时卖给了MJT海福特育种公司，今年他获得了海福特世界冠军。



Different approach -- hands on practical knowledge from experience in Canada and China

方式不同——从加拿大和中国的工作经验中获取的实践知识

metabolic disease

代谢性疾病

do the little things right everyday to prevent

把日常小事做好来预防

proper equipment

合适的设备

you will increase your profit line

将会增加利润线

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## Metabolic diseases 代谢疾病

- digestive disorders are responsible for 25-33% of feedlot deaths, plus decreased performance and efficiency.
- 消化系统紊乱占肥育场死亡原因的25%-33%，另外还会造成生产性能和效率的下降。
- variety of nutritional management, genetic, behavioural and environmental factors can contribute.
- 可以由营养管理、遗传、行为和环境条件中的几种因素而造成。
- Can be primary or secondary to other disease- inter relationship
- 可以是原发性的，也可以继发出其他疾病- 相互关系- pneumonina for example 例如肺炎
- Occur primarily in cattle fed high grain finishing rations.
- 主要发生在吃谷物含量高的育肥配方的牛只。
- increasing roughage level will decrease risk but is usually not economically feasible
- 增加粗饲料水平会减少风险但通常是不经济的。



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on arrival versus 2 days later

入场当天与2天后对比

drugs and nutrition not working

药物和营养都没用

Matt



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Metabolic Prevention 代谢疾病预防 NEVER RELY ON ANTIBIOTICS 永远不要依赖抗生素

Create a strong immune system 要创造出强大的免疫系统

- 1) Starting point to prevention? 1) 预防的起点?
- 2) What details about nutrition including processing, commodities, and feed additives 2) 包括加工、饲料和饲料添加剂在内的营养方面的细节都有什么?
- 3) What is good bunk management? 3) 好的食槽管理是什么样的?
- 4) What are the little things that you need to watch or do for prevention? 4) 需要观察或做的预防方面的小事都有什么?
  - a) access to feed and water a) 食槽和水槽的通路
  - b) cleanliness b) 清理
  - c) disinfection/flies c) 消毒/苍蝇控制
  - d) bedding procedures d) 垫床程序
  - e) hardware e) 铁器
  - f) pen conditions f) 牛舍条件
  - g) health g) 健康
  - h) sorting/preconditioning/handling h) 调群/预处理/保定
  - i) when to sell i) 出栏时间

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immune system vs disease depends on doing the little things  
小事做的怎样，会决定哪个是免疫系统，哪个是疾病。



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- Polio 脊髓灰质炎
- enteritis 肠炎
- coccidiosis 球虫
- bloat 臌气
- waterbelly 尿结石
- acidosis 酸中毒
- laminitis 蹄叶炎
- liver abcess 肝脓肿
- sudden death syndrome 猝死性死亡



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Prevention  
预防

calf to plate operations it starts scour prevention  
自产自繁来肥育的经营从预防腹泻开始

for the rest it starts with isolation  
其余外购牛只来育肥的经营从隔离开始

For prevention and treatment it is crucial to maintain a strong immune system with adequate nutrition and treat the disease of origin well to prevent it from becoming enteritis.

预防和治疗的关键是保持一个强大的免疫系统，供给足够的营养，治好疾病源以防止转变成肠炎。

CREATE MOMENTUM

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## Scour prevention:

1) Good nutrition of the cow, proper timing of vaccines when used, and insuring that the calf gets a good supply of colostrum

2) Prevent creating cold, wet, drafty calving areas, especially where there is high animal concentration

3) Isolation of scouring calves and their mothers and moving healthy cow and calf pairs out of the calving area as soon as possible can help reduce the contamination and avoid exposing more susceptible calves

Most of these infections are actually carried and perpetuated by adult carrier animals. Disease results when management and environmental conditions favor their transmission and reduced resistance in the calf. Therefore the cows should be kept out of the calving area until calving begins.

## 自产犊牛的腹泻预防:

1) 母牛营养不良, 如若使用疫苗接种时间要适当, 并确保犊牛得到良好的初乳供应。

2) 防止造成产犊区域寒冷, 潮湿, 气流, 特别是在动物高度集中的地方。

3) 隔离出腹泻犊牛和它们的妈妈, 并尽快将健康的母子牛移出产犊区, 可以帮助减少污染, 避免暴露给更多易感犊牛。

大多数感染实际上是由成年带菌者携带和延续下去的。当管理和环境条件有利于传播且犊牛的抵抗力降低时, 疾病就会发生。因此, 应该等到母牛产犊开始时再放入产犊区。

## Increase performance by keeping the rumen healthy 通过保持瘤胃健康来增加生产性能

No matter what the commodity is; you need a feed analysis done to assess feed value to decide if the price will be economical in your ration.

无论是什么饲料，都需要进行饲料分析来评估饲料价值。根据结果来决定这个价格的日粮是否划算。

Any commodity sourced needs to be fed for at least 90 days or don't buy it; have to keep rations consistent.

任何采购的饲料都需要保证至少90天的饲喂，否则不购买；必须保持日粮的稳定性。

Byproducts like DDG can be a great alternative source of protein and energy; but you need to make sure you test the sulfur content. Sulfur can create polios and abortions on excessive levels fed (0.4% is the maximum sulphur level on a dry matter basis in a ration).

像酒糟这样的副产品可以是蛋白质和能量的一个很好的替代来源；但要确保检测里面的硫含量。硫含量过高会导致脊髓灰质炎和流产（0.4%是按日粮干物质计算的最高硫含量）。

Effective fiber is ration fiber of sufficient particle size to stimulate normal rumen fermentation, including cud chewing and production of buffers from saliva. If particle size of corn can be increased; this would increase cud chewing therefore reducing acidosis.

有效纤维是指颗粒够大的日粮纤维，可以刺激正常的瘤胃发酵，包括反刍和生产唾液缓冲液。如果可以增加玉米的颗粒大小，那么会增加反刍，从而减少酸中毒。

Silage should be between 2-5 cm in length to help stimulate rumination and ensure motility; but avoid the chop being longer than the distance between the nostrils as that will cause them to sort the ration creating the dominant ones to eat the concentrate and leave the roughage for the timid creating digestive problems as a result.

青贮饲料长度应该在2 - 5厘米之间帮助刺激瘤胃反刍并确保蠕动; 但避免切割长度比鼻孔之间的距离长, 因为会导致牛只挑食日粮, 致使群体中占主导地位的牛只采食精料, 把粗饲料留给胆小的牛只, 造成出现消化问题。

It is important to include a level of forage in the diet that allows for proper rumination and saliva production but does not cause a decrease in intake. Normal finish ration we will feed will be between 7-10% inclusion rate on a dry matter basis.

重要的是，在日粮中加入一定水平的粗饲料，使产生适当的反刍和唾液，而不会导致摄入量减少。正常育肥料中，我们会饲喂7-10%干物质的包合率。



powderized in  
concentrate  
粉面精料

silage separation  
分离青贮

ground corn  
粉碎玉米

dry roll 干碾压

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The more grain is processed, the more starch is exposed to bacteria in the rumen, making it easier to digest and ferment, therefore more likely to cause acidosis.

玉米加工越细，暴露在瘤胃细菌的淀粉越多，使之更容易消化和发酵，因此更可能导致酸中毒。



## Performance data for various grain sorghum flake weights 不同重量的谷物高粱片的生产性能信息

Item 各项	Flake Weight(lb/bushel) 薄片重量 (磅/蒲式耳)		
	22	25	28
Number of pens 牛舍数	12	12	12
Number of steers 阉牛数	112	112	112
A.D.G.,lb. 日增重, 磅	2.99	3.09	3.21
Intake,lb.DM 摄入量, 磅干物质	18.4	18.8	19.0
Feed/gain 饲料/增重	6.13	6.10	5.92
Production data 生产信息			
Rate,ton/hr. 比率, 吨/时	1.155	1.521	1.929
Energy cost,\$/ton 能量成本\$/吨	3.79	2.87	2.26

Try to avoid soil contamination of silage and ensure good fermentation to pH 4, to kill clostridia (at least 577 kg per cubic meter).

尽量避免青贮区的土壤污染,确保良好的发酵至pH4,来杀死梭菌(至少每立方米577公斤)。

Soil contamination or excess moisture can create butyric acid (rancid, fishy odour) in the silage resulting in poor intakes and metabolic issues

土壤污染或水分过多会在青贮饲料中产生丁酸(酸臭、鱼腥味),导致摄入量不足并产生代谢问题

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## Feed additives to help reduce risk of bloat and acidosis

使用饲料添加剂，来帮助降低胀气和酸中毒的风险

1) Adding buffers like sodium bicarbonate (1% on a dry matter basis)

添加像碳酸氢钠这样的缓冲剂（日粮干物质基础上的1%）

2) Supplementing the diet with direct-fed microbials (like yeast) that enhance lactate utilizers (growth of more beneficial bacteria) in the rumen may reduce the risk of sub acute ruminal acidosis.

在日粮中添加直接饲喂的微生物(如酵母)，可以提高瘤胃中乳酸的利用率(更多有益菌的生长)，从而降低亚急性瘤胃酸中毒的风险。

3) Ionophore (monensin) supplementation may also reduce the risk by selectively inhibiting ruminal lactate producers.

通过选择性地抑制瘤胃乳酸生产者，添加离子载体(莫能菌素)也可以降低风险。

In North America because of cost and result we use monensin; my nutritionist in the USA will use yeast in background rations for 60 days then reduce to half a dose if monensin not available.

在北美由于成本和效果我们使用莫能菌素，但是如果不能使用莫能菌素了，我在美国的营养师说会在架子牛料中使用酵母，正常剂量使用60天，然后将酵母剂量减半。

## Bunk management 食槽管理

If cattle are fed once daily, they may be hungrier, more likely to overeat, and more prone to rumen acidosis. This approach may also cause more competition at the bunk leading to variable intake among cattle and day

如果每天饲喂牛只一次，它们可能会更饿，更容易过食，更容易发生瘤胃酸中毒。这种方法也可能导致更多的食槽竞争，导致牛只之间和每天的摄入量不同。

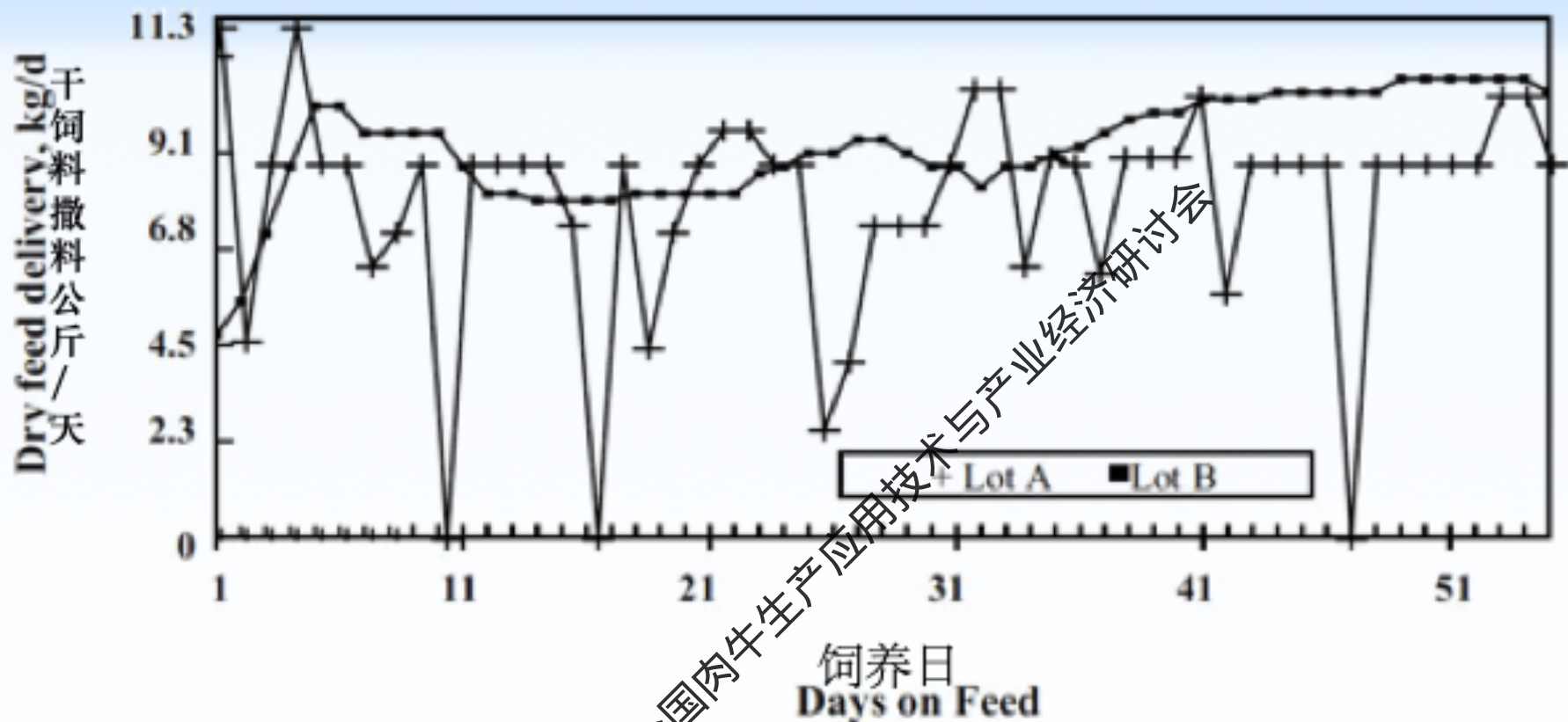
Maintaining consistent feeding time(s), available bunk space, and adequate mixing, etc. helps to maintain an optimal microbial population in the rumen.

保持稳定的饲喂时间、足够的食槽空间和适当的混料等有助于保持瘤胃微生物菌群的最佳状态。

Slick bunk management has been shown to reduce feed sorting and waste, and increase consistency of consumption, which reduces rates of acidosis. Careful management is needed to allow cattle to completely clean out the bunk without limiting feed intake.

空槽管理已得到证明可以减少挑食和饲料浪费，并增加采食的稳定性，从而降低酸中毒的发生率。需要小心管理，让牛只完全吃光食槽的饲料，而又不会限制其饲料摄入量。

- Typically producers think a slick or empty feed bunk in the morning means that gain has been lost, but this is not necessarily true.
- 通常情况下，生产者会认为早上光槽或空槽意味着损失了增益，但这并不一定是真的。
- Feed efficiency can be improved by slightly restricting feed intake to levels that are 95-97% of full feed intakes; if animals are restricted too much this will result in reduced average daily gains.
- 可以通过将饲料摄入量限制在95%-97%分饱的水平来提高饲料效率；如果动物受到太多限制，会导致日增重减少。
- Over-feeding cattle can be more detrimental, because of the resulting wider variation in intake, which can lead to digestive disorders; while the slick bunk will improve feed efficiency and reduce sub-acute acidosis.
- 但过度饲喂牛只可能会更有害，因为摄入量会有更大的差异，这会导致消化紊乱；而光槽则会提高饲料效率及减少亚急性酸中毒。



Feed deliveries expressed as dry matter per animal daily for representative pens. Lot A was offered ad libitum access to feed; Lot B was fed using a slick-bunk management system. -- Crandalls- liver

撒料数据表示的是典型牛舍里每头动物每日干物质采食情况。A组是保持饲槽一直有料的，B组则是使用空槽管理系统。



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bunk management to promote consistent intakes

加强食槽管理来促进采食稳定

FF – slick bunk and/or 75-100% cattle waiting  
F—slick bunk and/or 50-75% cattle waiting  
OF—slick bunk and/or 25-50% cattle waiting  
O—few crumbs and/or 25% cattle waiting  
O+ ---- <2 kg/head and/or 10-25% cattle waiting  
+ --- 2-4 kg/head and/or 10% cattle waiting  
++ -- >4 kg/head and/or no cattle waiting

A perfect pen at feeding time will have a clean bunk 1/3 cattle waiting at the bunk, 1/3 standing around, the rest 1/3 lying down. The normal scenario, the cattle should have a clean bunk at least an hour before feeding in the morning. Consider the time they should be fed along with what's in the bunk when you make their bunk score.

You need to check the bunks twice a day to monitor aggression this is more important than residue in the bunk. Be proactive not reactive

FF - 空槽和/或75-100%的牛等候  
F- 空槽和/或50-75%牛等候  
OF-空槽和/或25-50%牛等候  
o- 一点碎屑和/或25%牛等候  
O + ---- <2千克/头和/或10-25%牛等候  
+ --- 2-4千克/每头, 和/或10%牛等候  
++ -- >4千克/每头, 和/或没有牛等待

投料时理想的牛圈饲槽干净, 1/3牛在饲槽上等待, 1/3站在周围, 还有1/3躺卧。正常情况下, 在早晨投料前至少一个小时饲槽已经吃干净了。当你做饲槽评分时, 要考虑一下再次饲喂牛只的时间以及饲槽里还剩下多少饲料。

你需要每日检查饲槽两次来监测饥饿情况, 这比检查饲槽残渣更重要。积极主动, 不要被动



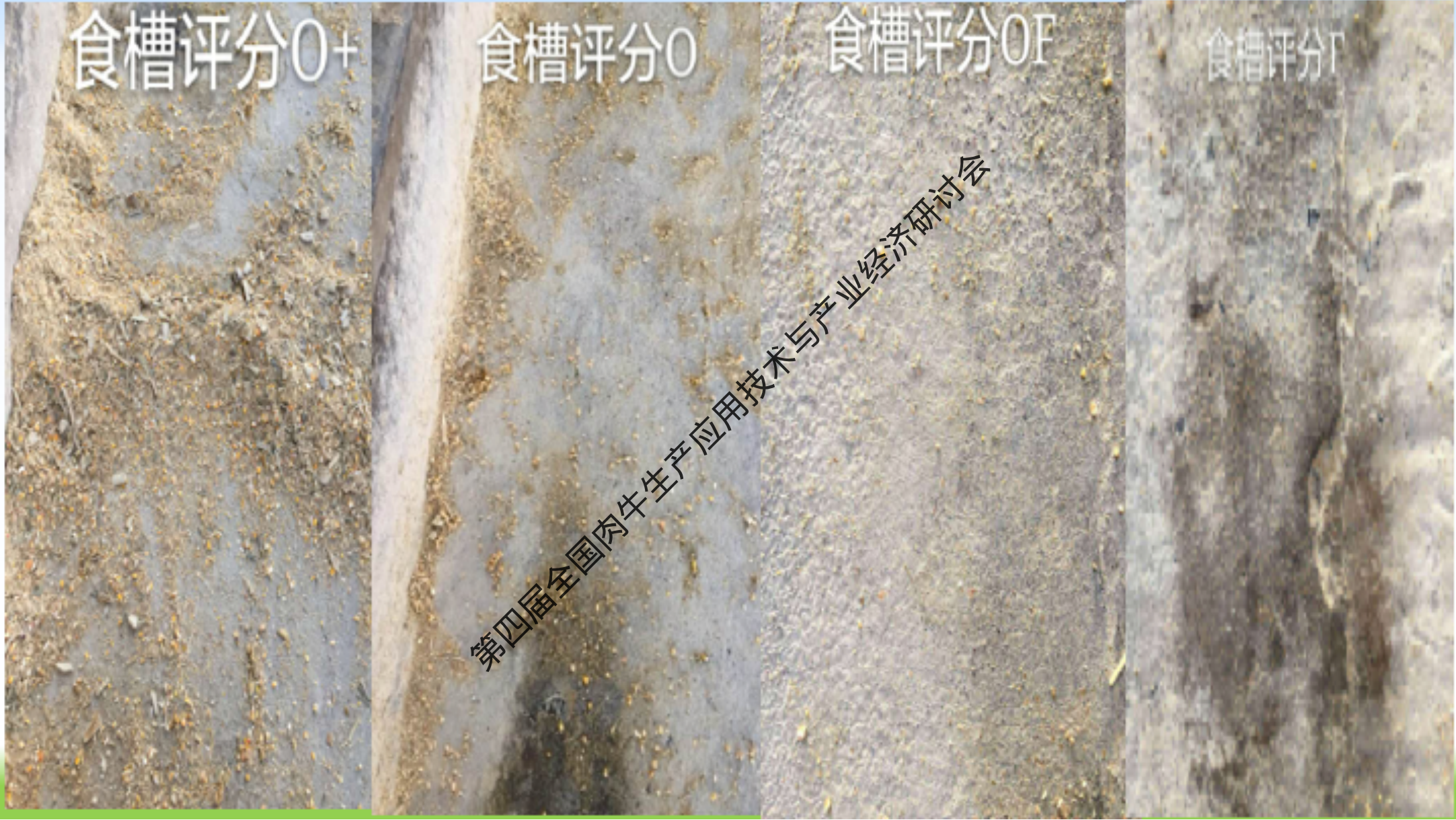
食槽评分0+

食槽评分0

食槽评分0F

食槽评分F

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Have fed 17,000 head per day with this truck per day with just one person. When you have the proper equipment it reduces labor. On yearlings we calculate one person per 1000 head and one per 700 on fresh weaned calves.

使用这台饲喂车一人每天可以饲喂17000头，当你拥有合适的设备时将会减少人工，对于周岁牛我们会按照1人管理1000头牛来计算，而新断奶犊牛是每人管理700头。



## FEED SHEET FOR FINISHERS 育肥牛饲喂表格

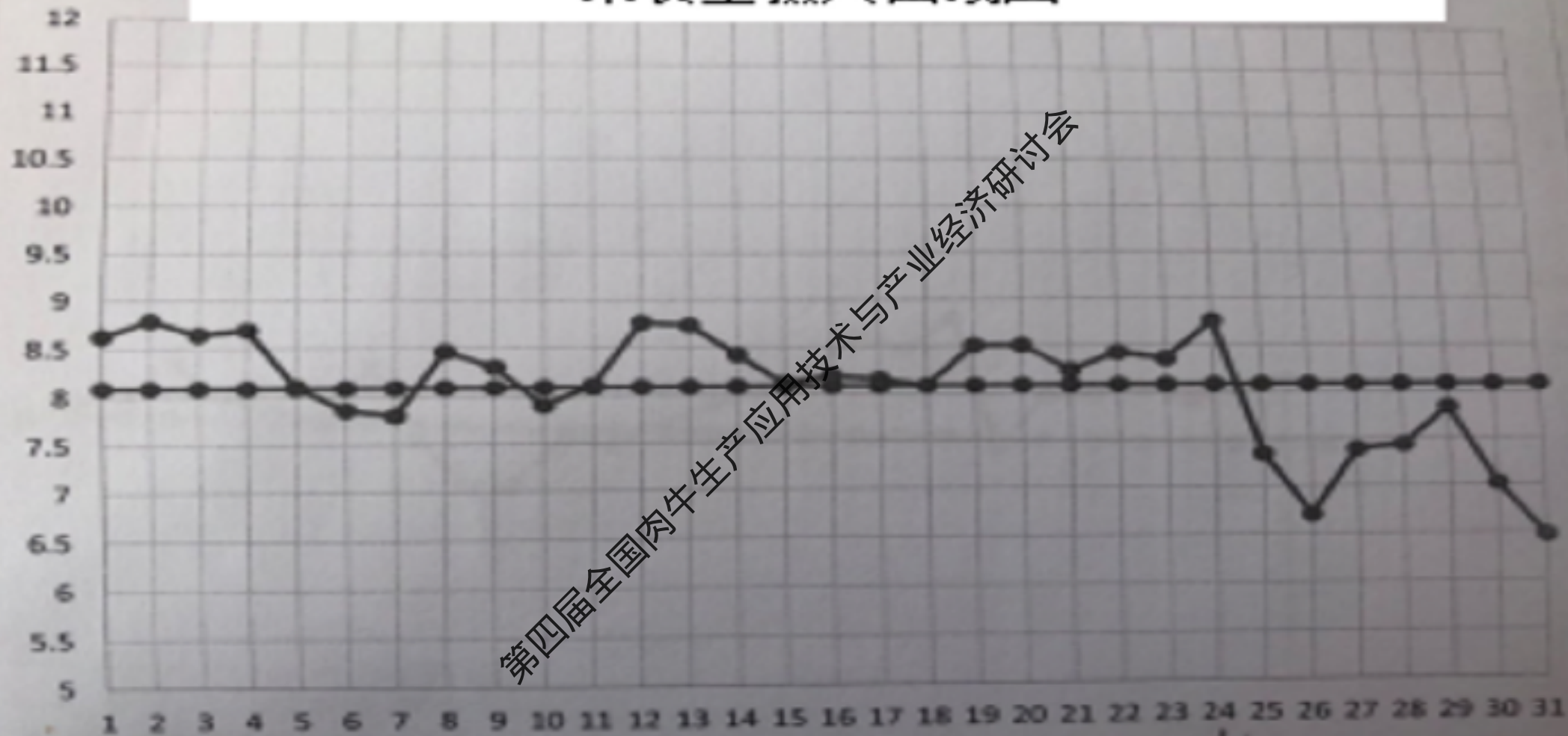
PEN: _____ 牛舍 _____		MONTH: 月份: _____		IN WGT: 购买体重: _____						
日期	DATE	牛头数 #HEAD	当前体 重#CUR WGT	日粮 Ratio n	饲槽评分 BUNK SC	需求 CALL	饲喂 量 Fed	干物质采 食量 DM Intake	平均采 食量 kg / hd	备注 COMMENT

**目标采食量 : 100kg- 3.5%, 200kg- 3%, 300 kg – 2.7%,  
400 kg-2.4%, 500 kg -2.1%, 600 kg-1.9%**

It is critical to maintain individual pen consumptions to watch for intake trends. You need to be able to watch 5 day and 14 day average DMI to maintain a slow but consistent increase on intakes.

记录单个牛栏的采食量，对于预测摄入量趋势至关重要。根据5天和14天平均干物质采食量，保持摄入量缓慢但稳定地增长。

# 采食量摄入曲线图



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↓  
群

The biggest risk for metabolic disease is during the transition phase from grower to finisher rations; you should have at least 4 setup rations to help the rumen adjust to the extra energy. 代谢性疾病产生的最大风险是在从架子牛料向育肥料过渡的阶段;应该至少设置4阶段过渡日粮,以帮助瘤胃适应额外的能量。

For moving cattle to a finisher ration we will do blending periods to transition them smoothly and quickly. For each switch we will increase the energy around 10% until we reach the final stage. Feed two days of blend with old ration in the morning and new in the afternoon (don't allow the bunk to become empty in between feedings during the day). On day 3 you give them 3 days on the new ration then you can start to blend to the next stage. 对于给牛只吃育肥料,我们需要有混合期来给它们平缓并快速地过渡。对于每次变换,我们将增加大约10%能量,直到完成最后一步。混料的时候是早上旧配方,下午新配方(在白天时间几顿饲喂之间不要出现空槽)。从混料第三天开始,喂它们3天新配方,然后你就能开始混下一阶段了。



TMR delivery– has to be even (including partial) and to maintain competition allowing all cattle to eat instead of just the dominant ones. This is also a major cause of metabolic disease both for the dominant and the weak because of the inconsistency it creates.

TMR投料 - 必须是均匀的（即使只有部分料，也要均匀撒给每头牛），保持竞争，让所有的牛只都能采食到，而不是只有占主导地位的牛只能抢到。因投料不均匀造成的摄入量不稳定，也是导致占主导地位的牛只和弱牛都会出现代谢性疾病的一个主要原因。

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Prevention 预防

plate 盘子

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Muscle is mostly made up of water. ( 45% on a mature fat animal ) .

Water is also a major mechanism for cooling  
Feed intake is positively correlated to water intake,  
Clean fresh water is consumed at higher rates than  
dirty and/or stagnant water.

肌肉主要由水构成；（成年育肥牛为45%）  
水也是降温的主要机制；  
采食量与摄水量呈正相关，干净新鲜的水的摄入率会高于  
脏水和/或污水。



disease and fly control  
疾病和苍蝇控制

should bed straw after the first cover is fed to  
prevent the cattle from filling up on straw  
creating inconsistency on intake

应该在第一遍投料之后垫床，预防牛只因  
采食过多垫草而导致摄入量不稳定。

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TMR magnets can help prevent metal foreign material from being consumed by the cattle

TMR磁铁可以帮助防止金属异物被牛只吃掉。

Should install on TMR and grain processing equipment  
应安装在TMR和粮食加工设备上。

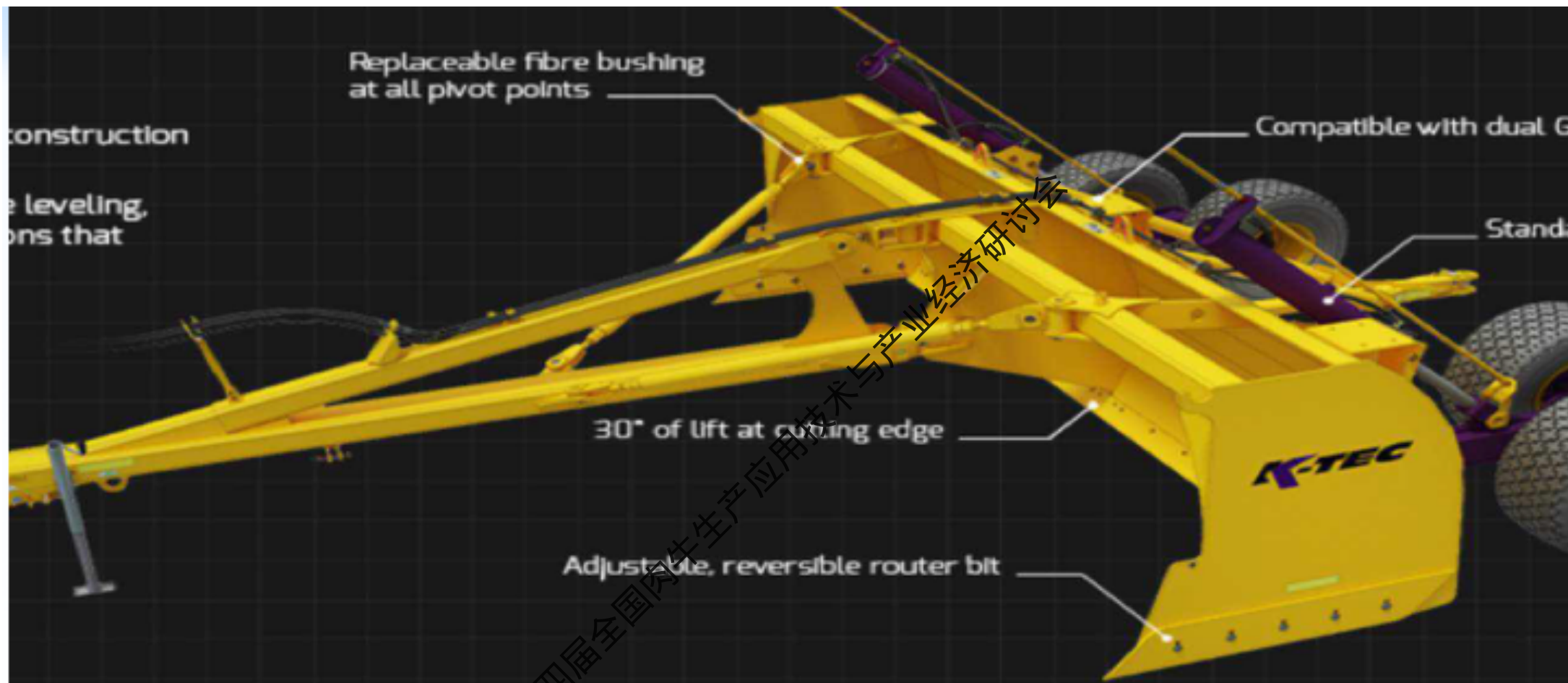


aa steers

## Prevention 预防

pen conditions to allow  
minimum expenditure of  
energy

优化牛舍条件，减少牛只  
能量消耗。



MODELS RANGE FROM  
**12 TO 28 FEET**  
(models in 2' increments)



**UPTO 20%**  
**YIELD INCREASE**  
\*(Based on research studies)



Health 健康

prevention 预防

early detection 早期发现

proper drug usage 合理使用药物

control/biosecurity 控制生物安全



## Indicators to monitor ruminal acidosis

### 用于监测瘤胃酸中毒的指标

1) decline in pen feed consumption of more than 10% for two or more consecutive days, causing weight loss.

连续2天或以上单个牛栏的采食量下降10%以上，导致体重下降。

2) pen incidence of bubbly scours of more than 30%.

单个牛栏里带气泡稀便的发生率超过30%

3) evidence of laminitis of more than 3%.

证明出现了3%以上的蹄叶炎

4) decrease in rumination (less than 50% of the calf rest time)

反刍减少(在休息时少于50%的牛只有反刍现象)



What do you see there?  
图中能看出什么？



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## What is the manure telling you? 牛粪能告诉你什么?

<p>Loose manure 稀便</p>	<ul style="list-style-type: none"> <li>• High protein (total or soluble); pasture 高蛋白(总蛋白或可溶性蛋白); 牧场</li> <li>• Insufficient fibre in ration 日粮中纤维不充足</li> </ul>
<p>Diarrhoea 腹泻</p>	<ul style="list-style-type: none"> <li>• Spoiled, mouldy feed or silage 腐坏、发霉的饲料或青贮</li> <li>• Ruminal acidosis 瘤胃酸中毒</li> </ul>
<p>Foamy manure or mucin casts (pieces of gut lining that indicate gut damage) 泡沫状牛粪或粘液状(粪中有几块肠粘膜显示出肠道受损)。</p>	<ul style="list-style-type: none"> <li>• Ruminal acidosis 瘤胃酸中毒</li> <li>• Increased hindgut fermentation 增加后肠发酵</li> </ul>
<p>Large particles, undigested feed 大颗粒, 消化不了的饲料</p>	<ul style="list-style-type: none"> <li>• Not enough long fibre/forage 长纤维/饲料不够</li> <li>• Cattle fed a total mixed ration (TMR) may be sorting feed 饲喂完全混合日粮(TMR料)的牛只可能正在挑食</li> <li>• Ruminal acidosis 瘤胃酸中毒</li> </ul>
<p>Manure variable in a feeding group 在一个饲喂组中粪便不同</p>	<ul style="list-style-type: none"> <li>• Dominant cattle in the group eating more concentrate 群体中占主导地位的牛只吃更多精料</li> <li>• Cattle are sorting feed; feeding slowly 牛只在挑食; 饲喂慢些</li> <li>• Spoiled, mouldy feed or silage 饲料或青贮饲料变质、发霉</li> </ul>
<p>Very dry dung 粪便非常干</p>	<ul style="list-style-type: none"> <li>• Diet is too low in protein, potential risk of the rumen stopping working 日粮中蛋白质含量过低, 会有瘤胃停止工作的潜在风险</li> <li>• Reduced water intake 水的摄入量减少</li> </ul>

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稀便中帶有  
粘液或粘膜  
碎片



feedlot to feedlot



COWBOYS

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## Preconditioned Cattle 牛只预处理

- feeder that has been vaccinated, castrated, dehorned, and weaned for 30-45 days - prefer 45
  - 架子牛已经做完疫苗接种、阉割、去角和断奶30-45天了 最好是45天。
  - advantages of extra weight gain for the producer and better performance and health for the feedlot
  - 优势是为生产者提供额外的增重，改善肥育场的生产性能和健康。
  - creep feeding will help the calves transit to the preconditioning period
  - 教槽饲喂有助于犊牛过渡到预处理期。
  - only real solution to disease is prevention ; much more simple if you only provide the animal with one stressful incident at a time.
  - 疾病的唯一真正解决办法是**预防** 如果你一次只给动物一个应激事件，那就简单多了。
- 1) process-  
处理-
  - 2) wean in home environment ( no trucking and social order established), old cows, quiet wean  
在熟悉的环境中断奶(无运输及社会秩序建立)，老母牛，安静断奶
  - 3) move to a feedlot to finish  
移到肥育场去育肥



KNEE HEIGHT,  
FEED ALLEY  
RAISED  
膝盖高度  
饲喂通道  
高度差

Careful handling is important as bruising may cause blackleg  
小心保定很重要，因为淤伤会导致黑腿病。

Sorting cattle: cattle have different genetics just like humans and then factor in the health issues for some it will equate into different growth patterns. Your job is to sort them into groups that will maximize their growth potential; the only way this happens is on a size basis to allow equal competition . 30-50KG on arrival then leave alone

调牛：牛只和人一样包括健康方面在内它们的基因是不同的，这会导致它们有不同的生长模式。你的工作就是把它们调入相应的群里，这样会最大化它们的生长，唯一能做到的方法就是它们大小均等，来平等竞争。入场按30-50公斤范围分群然后就不再挪动了。

## Cattle Handling 牛只保定

Working cattle too quickly can lead to bruises, injection-site damage, human injuries  
处理牛只太急可能会导致瘀伤、注射部位受损、人员受伤。

Stress caused by improper handling also lowers conception rates, reduces vaccination effectiveness, and reduces immune and rumen functions.

处理不当造成的应激也会降低受孕率，降低疫苗接种效果，降低免疫和瘤胃功能。

In addition to bruising losses from improper cattle handling, shipping fever and excess shrink (caused by the stress of mishandling) also lead to severe economic damage to the industry.

除了因不恰当的牲畜处理而造成的瘀伤之外，运输热和过度损耗(由处理不当的应激造成)也对行业造成了严重的经济损失。



When cattle become agitated and fearful, up to 20 minutes is required for their heart rate to return to normal (Grandin.com). As Grandin stated to understand animals you need to get away from words, cattle are sensory based-- observe things as a cattle will see things.

当牛只变得烦躁和恐惧时，它们的心率需要20分钟才能恢复正常(Grandin.com)。正如格兰丁所说，要理解动物，你需要撇开语言，多去观察事物，因为牛只是以感官为基础的，它们会用眼睛看事物。

proper facilities 合适的设备

Way I was brought up-

hydraulic chute  
液压保定架



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3-4 people can process 100 head per hour with this system; also most have chuteside computers for permanent records immediately.

使用这一系统每小时可以处理100头牛，而且大多数系统在保定架处都有电脑可以立即进行永久性记录。





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Cloud program performance software that is very reasonably priced. Tag ID , labor, close your eyes  
 云程序生产性能软件价格非常合理。身份识别

PERFORMANCE		Group 25		None		Print	
Overview		Close Out (A)	Group 25	None			
		Whole Group	On Feed	Sold			
Death Loss %	死淘%	4.07%	Feeding Period	饲喂期	343		
Cattle on Feed	存栏	152	Avg Days on Feed	平均饲喂天数	305.7; 305.3		
Total Head Days (Deaths In, Out)	总头日	40,221; 36,477					
In Weight	体重	28,560 lbs	Purchase Weight/Head	购入体重/头	145 lbs		
Projected Weight	预计体重	84,697 lbs	Sale Weight	售卖体重	13,223 lbs		
Projected Weight/Head	预计体重/头数	438 lbs	Sold weight/head	售卖体重/头	401 lbs		
Feeder Cost/CWT	饲喂成本/	\$134.06	Total Fed (Deaths In, Out)	总计饲料	1,438,499 lbs; 1,351,290 lbs		
Total Dry Matter Fed (Deaths In, Out)	总干物质饲喂	669,644 lbs; 427,124 lbs	Dry Matter/Head/Day (Deaths In, Out)	干物质/头/天	11.52 lbs; 11.14 lbs		
Total Gain (Deaths In, Out)	总增重	53,164 lbs; 23,933 lbs	Avg Daily Gain (Deaths In, Out)	平均日增重	0.88 lbs; 0.97 lbs		
Avg Feed Intake/Head/Day (Deaths In, Out)	平均摄入量/头/天	23.93 lbs; 7,304 lbs	Feed/Gain (Deaths In, Out)	饲料/增重	27.06 lbs; 24.61 lbs		
Consumption/Head (Deaths In, Out)	采食量/头	12.80 lbs; 11.46 lbs	Cost/Gain	成本/增重	\$0.62		
Dry Matter Feed/Gain (Deaths In, Out)	干物质饲料/增重	\$0.57; \$0.52	Avg Feed Cost/Ton	平均饲料成本/吨	\$42.20		
Feed Cost/Gain (Deaths In, Out)	饲料成本/增重	\$154.06					
Avg Feed Cost/Head	平均饲料成本	\$93.65					
Avg Dry Matter Cost/Ton	平均干物质成本/吨	\$69.75	Per CWT	Per Head	Per Group		
Cattle Sales		\$69.75	\$279.48	\$9,223.00			
Cost of Cattle (Deaths In, Out)		\$124.00; \$124.00	\$179.77; \$179.77	\$25,415.00; \$33,257.74			
Feed (Deaths In, Out)		\$35.83; \$33.70	\$154.06; \$154.29	\$30,350.36; \$28,543.09			
Cattle Interest (Deaths In, Out)		\$1.58; \$1.48	\$6.78; \$6.77	\$1,334.72; \$1,251.73			
Feed Interest (Deaths In, Out)		\$0.87; \$0.82	\$3.75; \$3.74	\$737.99; \$692.11			
Sales Expense		\$0.00	\$0.01	\$2.00			
Yardage (Deaths In, Out)		\$0.71; \$0.67	\$3.06; \$3.05	\$602.21; \$564.77			
Total Cost (Deaths In, Out)		\$80.81; \$75.93	\$347.42; \$347.63	\$68,442.18; \$64,311.44			
Break-even Cattle Alive		\$82.85	\$389.60	\$59,219.18			

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On good animals you should reach around 650 kg before shipping; but you need to sort the poor quality out between 400 to 500 kg

对于体况较好的牛只，出栏前应达到 650公斤左右；但是需要在它们400-500公斤左右时把体况差的挑出来。

standards to watch for :

三个需要注意的标准:

- a) consumption below 1.9% on a DMI. DMI干物质采食量低于1.9%，
- b) less than 1kg intake increase in intake. 一个月之内采食量增长幅度小于1公斤，
- c) expenses versus income. 支出对比收入

Always watch your consumptions and compare your gains to calculate if efficiency is still available (at times you can just sort out the poor end to ship)

随时观察牛只采食量，对比增重情况，计算是否还有饲养效率（偶尔可以将质量不好的牛只出栏）。



happy animal 牛只愉悦

Labour-4 people 劳工-4人



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**Thank you!**  
**谢谢**

**17609878365**

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