

EA News

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# **Change For The Sake of It**

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In life there is nothing so consistent as change and sometimes change just for the sake of it is no bad thing.

In recent years many products have had new livery, what was considered *de rigeur* in the late 20th Century can now often give an old and tired look.

Website are constantly being modernized and now, considering that EA News, started in 1995, has been in exactly the same format since late 2000, nearly 24 years, it is time for a fresh look.

While many changes have been made most are rather subtle.

The first change, about a year ago was in the logo regarding "Animal Welfare is Our Business."



While the original was fun the new look is softer and more akin to modern website type imagery.



The major changes in this issue are even more subtle. Most readers will not notice but there are changes in the fonts.

Comic Sans has been used for years for all the headings, despite the fact that computer nerds always denigrate it as a font not to be taken seriously.

Headings, plus the logo at the top are now all in the very modern Fira Sans, considered one of the most readable fonts.

Body copy, at this stage stays as Century Schoolbook but, for this issue, we did retain Comic Sans for the two brief articles on Muttley's Estate after all it is supposed to be a fun product!

# Muttley's Estate (see page7)



In the beautiful bays of Aotearoa, where the gentle breeze carries whispers of adventure, lies a sanctuary of indulgence unlike any other.

Muttley's Estate, nestled amidst verdant landscapes, offers a libation that delights our feline companions. Crafted from the finest catnip harvested under the New Zealand sun, our catnip wine is a sensory masterpiece designed to enchant and captivate.

Each sip unveils a symphony of flavours, a delicate dance of herbs and botanicals that evoke the essence of our land.



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### **No Second Injection!**

Work done in New Zealand (Young 2018) showed a 3% increase in pregnancy if their racemic cloprostenol dose is increased from 2 ml (500 µg) to 3 ml (750 µg) per cow. This tallies with previous data from around the world showing that the response rate in cows with a partially sensitive (or refractory) corpora lutea aged between 2-5 days, when the sensitivity towards PGF2a is questionable, is reduced. This can be improved by either increasing the dose rate or giving a second injection 24 hours later. (Wiltbank et al, 2015)

The recommended time for the second  $PGF2\alpha$  injection is 24 h after the first injection without any changes to the times of GnRH injection or TAI

Giving a second injection of racemic cloprostenol was the basis of a new programme which was really the old OvSynch design with the modification of a second injection of PGF2a during the OvSynch protocol to improve luteolysis. Whether or not to adopt the higher dose is a matter of benefit/cost ratio, considering the time spent for double injection, i.e. a second visit, and for the cost of a larger dose.

This resulted in a slightly more complex but effective programme that satisfied welfare concerns: One practice in particular promoted this system to farmers and claimed they were happy to be associated with a better animal welfare programme despite the cost of an extra visit and extra injection.

This regime, based on the OvSynch protocol relied on older technology such as gonadorelin as the GnRH component and racemic cloprostenol as the PGF2 $\alpha$ .

Now available in New Zealand is the single isomer D cloprostenol (Dalmazin – Fatro) which has proven to have three times the potency of the racemic mixture.

When we look at the work done by Montaser et al comparing racemic cloprostenol with dinoprost and D cloprostenol it appears that the pure potency of the D cloprostenol makes it more effective in the presence of prostaglandin dehydrogenase and so offers a more economical solution.

Note: generic names are substituted for the trade names used in the original article.

In addition Valldecabres-Torres et al, indicated that there is a further increased benefit with an increased dose of d cloprostenol, 300  $\mu g$  in place of 150  $\mu g$ .

"this makes it easier for practitioners to convince farmers to engage in a planned reproduction programme."

Also available in New Zealand is a newer generation GnRH in the form of lecirelin (Dalmarelin - Fatro). Lecirelin produces a higher and much longer LH spike so improving chances of ovulation and fertilisation.

Therefore, for a better response with refractory corpora lutea in a blind synchronisation programme, the options are:

1) If using racemic d/l cloprostenol, or dinoprost, give an extra injection thus increasing the workload and the cost of treatment.

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Group	Follicular size (mm)	Days to heat	1st insemination pregnancy rate (%)
Dinoprost 25 mg	11.17±0.433	$3.7 \pm 0.26$	10
d/l cloprostenol 500 μg	11.53±0.33	$3.3 \pm 0.21$	30
D cloprostenol 150 μg	15.5±0.82	$3.6 \pm 0.31$	40

### **Lost Watch**

One night at the conference Tony came upon Nagy looking for something under a streetlight. Tony asked Nagy what he had lost.

He said that he had lost his watch. Since it was obviously not there, Tony asked Nagy if he was sure that he had lost his watch in that spot.

Nagy said that he had lost the watch at another place, farther down the street.

Tony then asked Nagy why he was looking for the watch under the streetlight and he replied, "The light is much better here."



## **No Second Injection!**

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- 2) Get similar results, with no cost increases, using a standard dose (150 µg) of d cloprostenol (Dalmazin)
- 3) If cost is not the object get the best results using 300 µg of d cloprostenol (Dalmazin)

Option 2 coupled with Dalmarelin as the GnRH component ensures a high efficacy at a very economical rate.

Thus the protocol is as below:

This protocol is similar to the original OvSynch programme but utilises ingredients with greater potency and at lower cost resulting in a protocol unmatched for efficacy; every bit as good as the extra PGF2a method.

There is also the advantage of one less veterinary visit making it much more attractive to clients; this makes it easier for practitioners to convince farmers to engage in a planned reproduction programme.

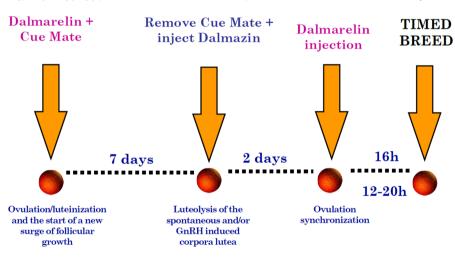
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### **Pronunciation**

The two students went to Honolulu on holiday.

Soon they began to argue about the correct way to pronounce the word "Hawaii."

One student insisted that it's Hawaii, with a "w" sound.

The other student said it was pronounced like "Havaii," with a "v" sound.

Finally, they saw an old native on the beach, and asked him which was correct.

The old man said it's "Havaii."

The student who was right was very happy, and thanked the old man.

The old man said "you're velcome."



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## **Handling Prostaglandins**

How safe are prostaglandins as far as the handler is concerned? All on the market have stringent label warnings particularly regarding respiratory problems and miscarriage, and these warnings are thoroughly justified.

One of the biggest issues is that prostaglandins are small molecules that are extremely lipophilic, so that they are very rapidly absorbed through intact skin, making them a risk factor for asthmatics and also women of child bearing age. In addition, there are anecdotal reports of veterinarians complaining of headaches after handling prostaglandins.

Are all prostaglandins the same? Not really when speaking of reproductive efficacy but, in this regard, the risk does appear the same for all. In this age of litigation, no company is going to remove such warnings but can handlers feel safer with any particular compound?

The short answer is probably. While there is a dearth if data relating to user safety it does seem logical that D cloprostenol is less of a risk than the racemic mixture of D/L cloprostenol. It is well established that all the reproductive effects are the result of the D isomer and prevailing opinion is that most of the untoward side effects

are due to the L isomer. This would put D/L cloprostenol in a similar category to the infamous thalidomide, where one isomer was responsible for all the beneficial effects against morning sickness but the other isomer in the racemic mix had teratogenic properties resulting in thalidomide becoming the Hitler of all drugs.

While not quite so draconian or clearcut, after all prostaglandins simply require care in handling, it is conceivable that D cloprostenol does appear safer than other prostaglandins, including the racemic mixture.

In unpublished data by Fatro, an examination was carried out of the contractile actions of D-cloprostenol, dl-cloprostenol and PgF2a on the smooth muscle of the ileum of the guinea pig (isolated and transferred to spiked solution).

The activity was assessed by measurement of extent (mm) of contraction of a tract of the ileum. Responses were compared with the contractions noted for the sample stored in standard acetylcholine.

Although the results of the studies may only be considered indicative, due to the range of conditions and the varying relations between dose and effect, it was noted that DL- cloprostenol exerts greater intestinal smooth muscle contractile activity than D-cloprostenol.

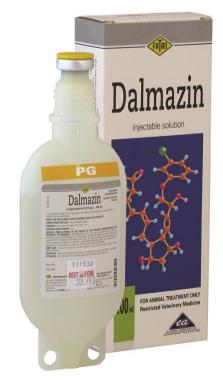
While the likely lack of respiratory side effects for D cloprostenol is presumed it is not fully proven in the literature, but there is another

" resulting in thalidomide becoming the Hitler of all drugs."

safety advantage for D cloprostenol, and that regards concentration. Because the ovarian and uterine receptors much higher affinity for D-Cloprostenol than for the racemic form the dextrorotatory isomer has a biological activity 3.5 times higher than the D-L form.

This is because, while the L isomer not only has no luteolytic effect, it also creates an esteric impediment in the receptors, impeding the action of the D isomer, which results

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### A Comet

The class is studying astronomy. The teacher points to a photograph, and says,

"Does anyone know what this is?

The class looked blank.

"It's a comet." said the teacher

"A what?" asked Nagy.

"A comet, Nagy. Don't you know what a comet is?"

"No." replied Nagy

"Well then," said the teacher, "Don't you know what they call a star with a tail?"

"Sure," replied Nagy, "Mickey Mouse."

## **Handling Prostaglandins**

(Continued from page 4)

in higher dosages when using DL Cloprostenol. This leads to more collateral effects from the racemic mixture because of its action on other tissues (intestines, vascular system etc).

Therefore, on comparison of the main pharmacological characteristics of racemic, dextrotatory and laevorotatory cloprostenol, we may draw the following conclusions:

cloprostenol is an optically active molecule and only the Dcloprostenol isomer is endowed with luteolytic action

D-cloprostenol exerts greater luteolytic and uterotonic action, than DL-cloprostenol;

although D-cloprostenol has a greater contractile effect on uterine muscle than DL-cloprostenol, it seems to have a lesser contractile effect on intestinal muscle:

the safety margin of D-cloprostenol is broader than for the racemic compound because of the lower dosages required (1:3.3).

So, in summing up we get back to the original question of can handlers feel safer with any particular compound? The answer given was probably, which is reasonably positive. D cloprostenol has lesser effect on intestinal muscle and so is more likely safer than D/L cloprostenol with respect to asthmatics. In addition, the lower concentration does increase the safety margin. However, the risk to pregnant women remains at least every bit as high so that needs to be taken into consideration.

Label warnings will remain in place but, except for women of child bearing age, the risk does seem lower for D cloprostenol rather than the racemic mix despite the fact that there is not a lot of concrete evidence either way in peer reviewed literature.

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### The Shoemaker

A man gets out of prison after twenty years. He decides to go back to the old neighbourhood where he used to live.

When he gets there he cannot recognize the place. Everything has changed a lot. The places he used to visit have all disappeared.

Even the pub has disappeared. He is very tired and would like to have something to eat.

He goes into a small café and has a coffee and a sandwich.

When he takes out his wallet he finds a shoemaker ticket in it.

He then remembers that the last thing he had done before being arrested was to take a pair of shoes to the shoemaker's shop.

He decides to go there and try. What a wonderful thing! The shoemaker is still at the same place.

He gets into the shop and tells the shoemaker that about twenty years before he had left him a pair of shoes to have them repaired. The shoemaker has a look at the ticket and says: "O.K. Come back tomorrow. They will be ready then."



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## **Alternative Thinking**

Often a late afternoon lecture at a conference can throw up a gem and, late on the first day at this year's NZVA Conference Jessica Moore-Jones spoke from Perth via Zoom to the Industry Branch on the subject of utilizing human behaviour to improve animal outcomes and client trust.

"After two years the Neo Nazis disappeared!"

The main thrust of this relatively short session was that, "if we always do what we always have we will continue to get the same result."

Jessica utilized a rather fascinating analogy featuring the story of a little town in Germany called Wunsiedel, located in Bayaria.

Neo-Nazis were attracted to the town because Hitler's deputy Rudolf Hess was once buried there. Despite the fact that his remains were exhumed in 2011 and his grave was destroyed, far-right extremists still flocked to the town year after year. For decades, these far-right extremists marched through Wunsiedel every year, to the despair of those who live there. Residents attempted protests and numerous legal complaints but the little town was still treated as a

place of pilgrimage for neo-Nazis all over Europe.

One year, without the marchers' knowledge, local residents and businesses sponsored the 250 participants of the march in what was dubbed Germany's "most involuntary walkathon". For every metre they walked, €10 went to a programme called EXIT Deutschland. EXIT - Deutschland is an initiative that helps people who want to break with right-wing extremism and build a new life.

Children ran along thanking the marchers and campaigners hung humorous posters to make the march look more like a sporting event, with slogans such as "If only the Führer knew!" and "Mein Mampf" (my munch) next to a table laden with bananas. They even

hung a sign at the end, thanking the marchers for their "donations".

The sign said "Links, zwo, drei, vier, fünftausend. Vielen herzlichen Dank", which translates as Left, two. three. four, five thousand. Many

many thanks – and the 5000€ amount was marked on the road.

After two years the Neo Nazis disappeared!

Thus, the message is that thinking outside the box can achieve great results when attempting to persuade. Whether it is weaning clients away from blanket dry cow antibiotic therapy or putting pets on a special diet, look for the keys that will promote compliance.

It is no different from training a dog, people often make the mistake of attempting to get the dog to understand what they are thinking, when the best results or gained from understanding the dog and what it is thinking. That certainly worked for the good people of Wunsiedel.



### **The Parrot**

A man bought a parrot that could speak five languages. He paid a thousand dollars for it.

The pet-shop owner said that he would deliver the bird that afternoon.

When the proud owner got home, he asked his wife if the parrot had been delivered. She answered,

"Yes, it has."

"Where is it?"

"It's in the oven."

"In the oven? But he could speak five languages!"

"Well, then, why didn't he speak up?"

## Muttley's Estate

Anthropomorphism (the interpretation of nonhuman things or events in terms of human characteristics, as when one senses malice in a computer or hears human voices in the wind) is a word often bandied about in a semiderogatory fashion when used in relation to animals.

Often it is a defensive mechanism to counter animal welfare components.

It also can have very positive aspects when used in a quirky manner, think George Orwell's Animal Farm or Disney's Mickey Mouse, with the film "Babe" being the ultimate example.

Anthropomorphism is also a popular with animal owners at festive times.

We often see on the news zoo animals getting special birthday cakes, they have no idea why the treat is there but it makes the watching public feel good.

It is the same with pets at Christmas times and other festive occasions

Pets are often dressed up in ridic-

ulous outfits but the upside comes with the treats they are given.

They again have no idea of the whys and wherefores but is a very positive experience for the owners.



It is in that vein that the Muttleys team have come up with the idea of pet wine.

Yes, it is quirky, but it also appeals to many pet owners as a lot of fun.

The quaintly named Muttley's Es-tate range offers six flavours, all based upon catnip.

In keeping with the fun aspect, they have names based on real wine brands but altered to have a cat or dog influence.

The flavours are, in decreasing order of catnip strength, Savignon Bark®, Cabarknet®, Champawgne®, Purrno Noir®, Prosecatt®, and Pawt®, all in 150 ml screw top bottles.













## **Urgent Call**

A doctor had an urgent call.

"Can you come immediately, doctor?" said the frantic woman on the phone,

"My little son has just swallowed a fountain pen.

""I'll be there right away" replied the doctor, then to calm her he asked, "What are you doing in the meantime?"

"Oh, I'm using a pencil."











## **Pearly Gates Pontiff**

The Pope died and went to heaven, where he was greeted by St. Peter. "Welcome," St. Peter said, "let me show you around."

St. Peter showed the Pope the streets of gold, choirs of angels, and so many wonderful things. At last, they came to a verdant meadow with a quaint cottage overlooking a lake. "And this is where you will be living," St. Peter said.

The Pope toured the small but well -appointed cottage. "Odd," he thought, "I truly expected a mansion in glory. But, then again, what more do I really need? I'm in paradise after all."

The Pope thanked St. Peter for the tour, and assured him he would be

very comfortable in the cottage, as the two walked back outside.

As the Pope took in the view, he spied a huge, glorious mansion across the lake.

"Oh," he exclaimed, gesturing with his arm, "that must be where God lives."

"No," St. Peter replied, "a lawyer lives there."

The Pope was livid. "A lawyer!?! A lawyer!?! I was Christ's emissary on earth and the head of His church, and I'm in this dump, but you put a lawyer over there?"

"Well, you see," St. Peter replied, "we get a lot of Popes, but that's our first lawyer."

