

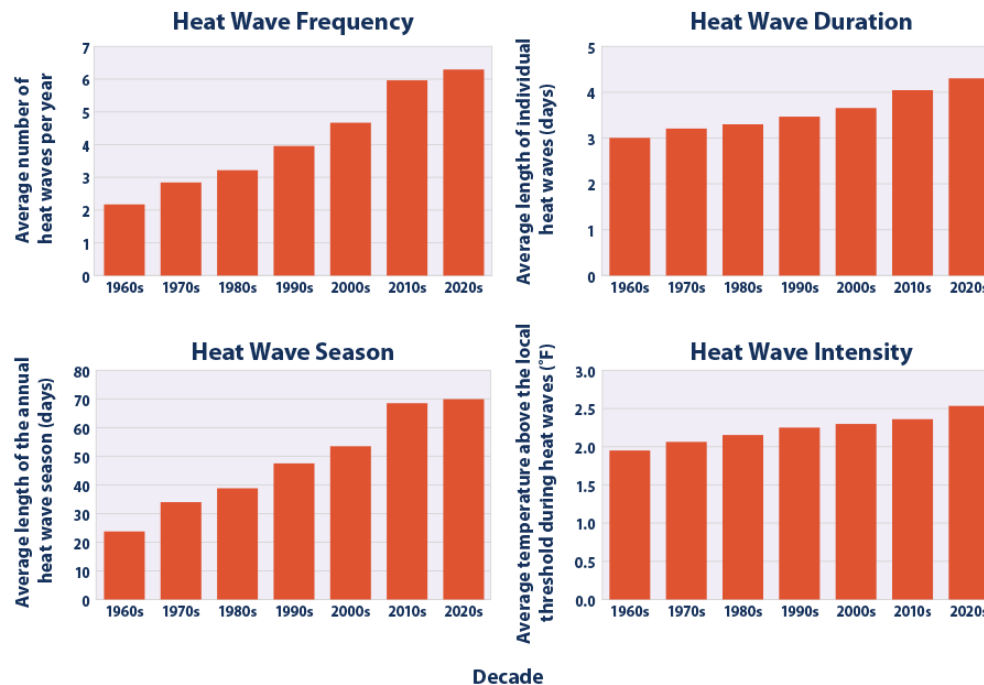


COOL-FX

the **easy & cost-effective** way to
reduce the temperature in your
buildings, **reduce heat stress** for your
livestock and **save on cooling costs**

Heat waves and warm days: an increasing challenge

USA

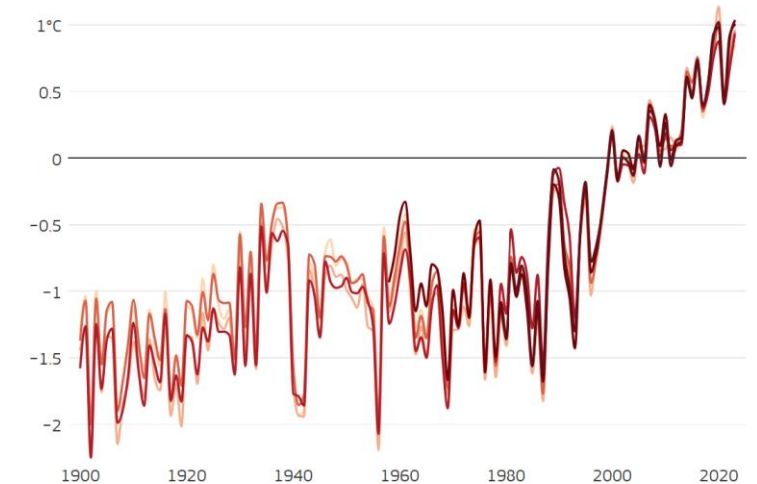


Europe

Anomalies in annual surface air temperature for European land (WMO RA VI Europe domain)

Compared to 1991–2020 average, various data sources

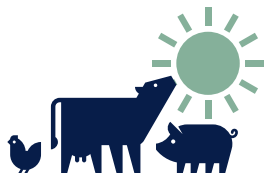
— Berkeley Earth (1900–2023) — GISTEMP (1900–2023) — HadCRUT5 (1900–2023)
— NOAA GlobalTemp (1900–2023) — JRA-55 (1958–2023) — ERA5 (1979–2023)



Data: HadCRUT5, NOAA GlobalTemp, GISTEMP, Berkeley Earth, JRA-55, ERA5 • Credit: WMO

Why keep the sun and heat out of your buildings?

Reduce heat stress for your livestock



Heat stress is a condition arising from high temperatures and humidity where livestock are unable to adequately regulate their body temperature. It results in production losses due to:

- Reduced feed intake
- Increased risk of diseases
- Heat stroke and even death

Save on cost of cooling



Reduction of the inside temperature and “shaving off the high temperature peaks” will save on the cost of cooling:

- Less energy consumption of cooling equipment (OPEX)
- Peak capacity of cooling installation can be less due to reduced (CAPEX)

Create better working conditions for people



Reducing the temperature in poorly insulated barns and buildings will improve working conditions, blocking direct sunlight coming in via skylights avoids the creation of extreme warm heat islands.

Have less degradation of your roof material



The temperature of a black roof in summer can easily be over 75 °C resulting in higher degradation of the roofing material, also the adverse effect of direct UV light can be reduced by applying a white reflective coating.

How to keep out the heat?

There are several ways to keep your barn cool, like for example insulation, ventilation, cooling or misting.

But these solutions:

- Require heavy capex investments
- Consume a lot of electricity



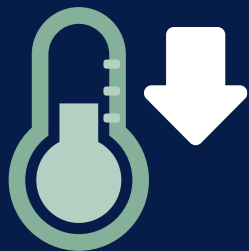
What if... there would be a solution that:

- can provide you cooling without heavy CAPEX investment, making it also viable for your less-insulated barns and buildings or even your rental properties.
- would be complementary to your existing cooling solution but you can save on energy cost by reducing the heat load.
- will allow you to make use of the heat provided by the sun in wintertime.



COOL-FX: THE EASY & COST-EFFECTIVE
WAY TO COOL YOUR BUILDINGS

COOL-FX



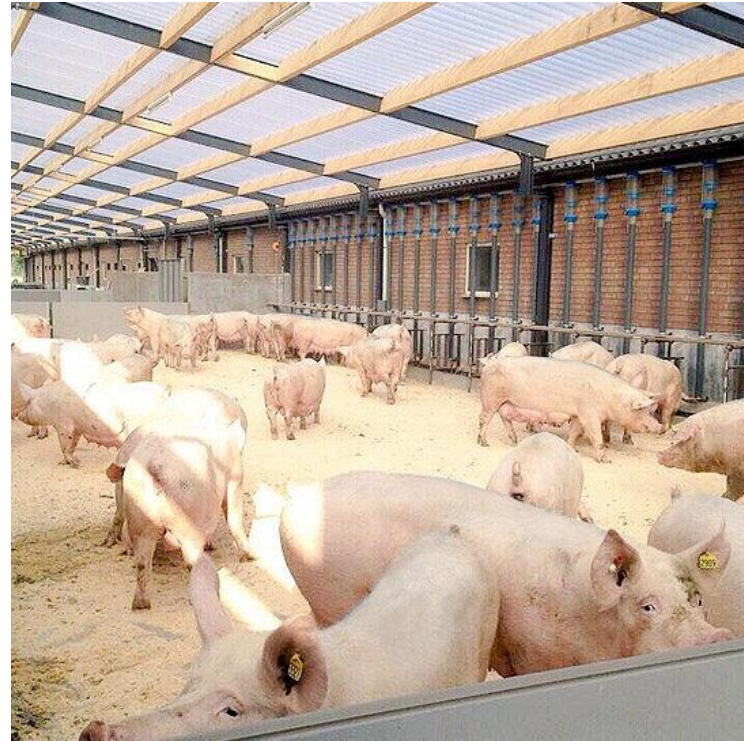
Reduce roof
temperature
by up to
40°C

Reduce indoor
temperature
by up to
7°C

- ✓ **Cost-effective**
€0,4- €0,6 per m2, excluding application
- ✓ **Easy to apply**
Mix with water and spray yourself or hire a (drone) contractor
- ✓ **Biobased & biodegradable**
Completely safe to use around your farm
- ✓ **Temporary solution**
Solution will work for 3-6 months



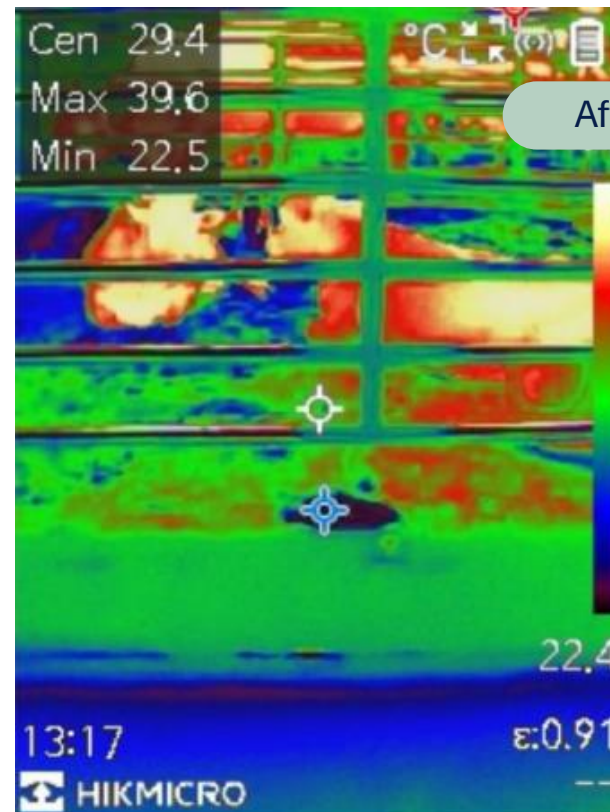
Additional cooling to support ventilators at pig farmer in the Netherlands



The fans available in this pig stable help, but not enough. With hot weather, more passive cooling is really needed, and this is where a coating like Cool-FX really comes in handy."

Result of applying Cool-FX:
Measured **7°C** difference in a non-insulated barn

Providing cooling in a cattle barn in South-Korea



Cool-FX has been applied on several barns with cows. When measuring the inside temperature at the place where the cattle are resting you can see **a difference of around 4 °C.**

The farmer observed quieter and less stressed cows.

Footage from storage barn with metal roof the United States



In the **non-treated metal roof**,
107° Fahrenheit (41° Celcius)

In the **treated metal roof**,
56° Fahrenheit (13° Celcius)



Outside temperature
70° Fahrenheit (21° Celcius)

Cool-FX has been applied on a storage barn with a metal roof. Even with an outside temperature of **21°C**, the difference in surface temperature was **28°C**

COOL-FX: THE EASY & COST-EFFECTIVE WAY TO COOL YOUR BUILDINGS

Not only for your barns!



Cool-FX is also very beneficial for cooling down poorly insulated and warm industrial buildings.



Ideal for preventing extreme temperatures and heat island of direct sunlight via sky domes and skylights.

Permanent versus Temporary coating

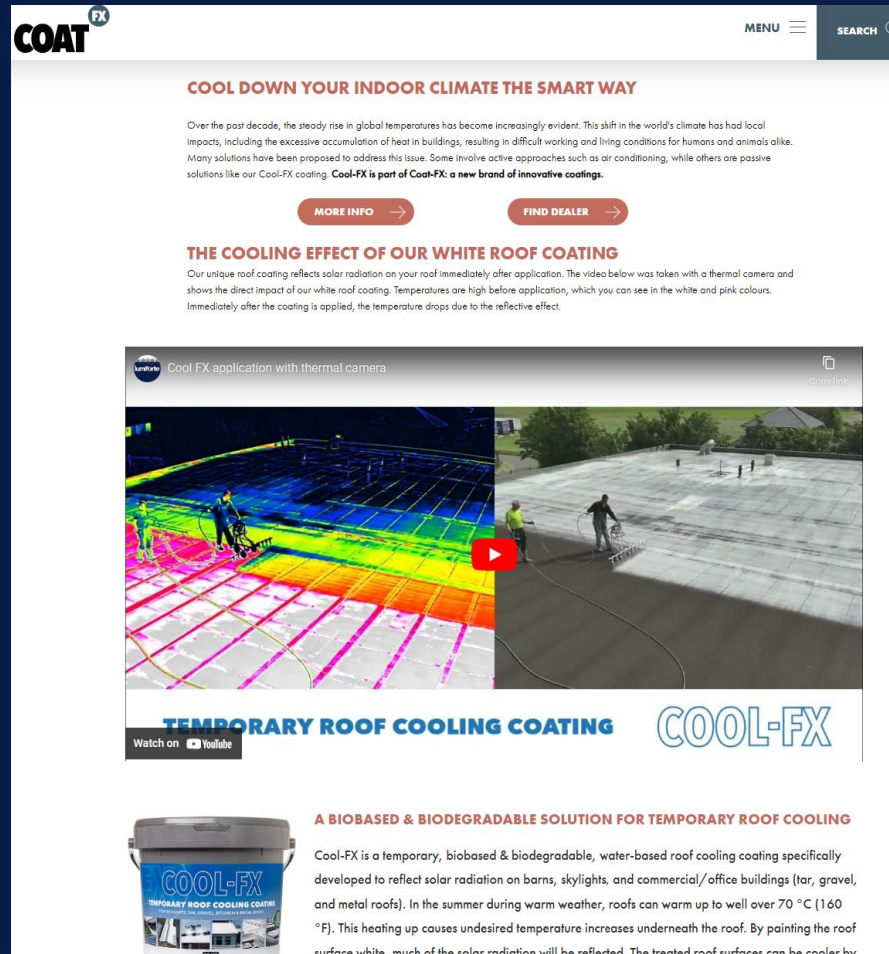
Characteristics	 Longevity	 Price applied (€/m²)	 Application	 Yearly benefit	 Environmental profile
Permanent Solutions	10-20 years	High (investment)	Difficult (Several layers, surface cleaning and preparation, long drying time)	Gains in summer balanced by energy loss in winter	Petrochemicals with huge environmental impact
Temporary Solution*	3-5 months	Low (Consumable)	Easy (Fast, No surface preparation, 1 layer)	No energy loss in winter, only summer gains	Development of biobased/biodegradable formulas (patented solution) with local raw materials**

* Temporary solution: Cool-FX coating

** >98% of raw materials are European, >96% are grown, extracted and transformed in France

COOL-FX: THE EASY & COST-EFFECTIVE WAY TO COOL YOUR BUILDINGS

Get support!



The screenshot shows the COOL-FX website. At the top, there's a navigation bar with the COOL-FX logo, a MENU button, and a SEARCH icon. Below the navigation bar, the main heading reads "COOL DOWN YOUR INDOOR CLIMATE THE SMART WAY". A paragraph of text explains the global temperature rise and the benefits of Cool-FX. Below this, there are two buttons: "MORE INFO" and "FIND DEALER". The next section is titled "THE COOLING EFFECT OF OUR WHITE ROOF COATING" and includes a paragraph about the reflective effect. Below this is a video player showing a thermal camera view of a roof being coated. The video is titled "Cool FX application with thermal camera" and has a "Copy link" button. Below the video, there's a "Watch on YouTube" button. At the bottom, there's a product image of a COOL-FX bucket and a section titled "A BIOBASED & BIODEGRADABLE SOLUTION FOR TEMPORARY ROOF COOLING" with a detailed description of the product.

COOL-FX

COOL DOWN YOUR INDOOR CLIMATE THE SMART WAY

Over the past decade, the steady rise in global temperatures has become increasingly evident. This shift in the world's climate has had local impacts, including the excessive accumulation of heat in buildings, resulting in difficult working and living conditions for humans and animals alike. Many solutions have been proposed to address this issue. Some involve active approaches such as air conditioning, while others are passive solutions like our Cool-FX coating. **Cool-FX is part of Coat-FX: a new brand of innovative coatings.**

[MORE INFO](#) [FIND DEALER](#)

THE COOLING EFFECT OF OUR WHITE ROOF COATING

Our unique roof coating reflects solar radiation on your roof immediately after application. The video below was taken with a thermal camera and shows the direct impact of our white roof coating. Temperatures are high before application, which you can see in the white and pink colours. Immediately after the coating is applied, the temperature drops due to the reflective effect.

Cool FX application with thermal camera [Copy link](#)

TEMPORARY ROOF COOLING COATING **COOL-FX**

Watch on [YouTube](#)

A BIOBASED & BIODEGRADABLE SOLUTION FOR TEMPORARY ROOF COOLING

Cool-FX is a temporary, biobased & biodegradable, water-based roof cooling coating specifically developed to reflect solar radiation on barns, skylights, and commercial/office buildings (tar, gravel, and metal roofs). In the summer during warm weather, roofs can warm up to well over 70 °C (160 °F). This heating up causes undesired temperature increases underneath the roof. By painting the roof surface white, much of the solar radiation will be reflected. The treated roof surfaces can be cooler by

More information

Check out our website for the latest news and more background information.

www.coat-fx.com

Find your dealer

Cool-FX can be bought with one of our distributors in your country.

Find an application partner

We can bring you into contact with one of our trusted application partners!

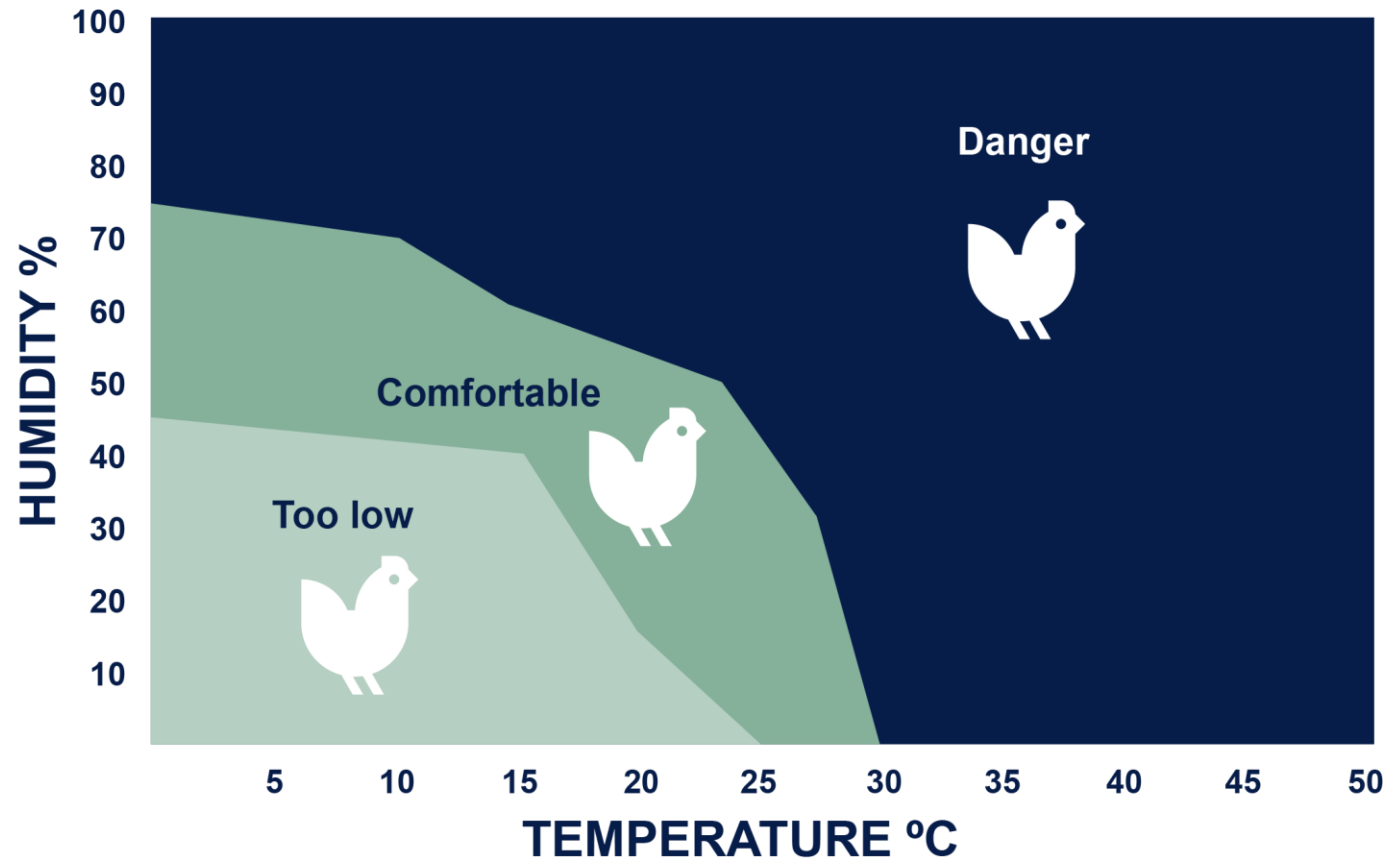


lumiforte[®]

[Video link](#)

[How to apply Cool-FX](#)

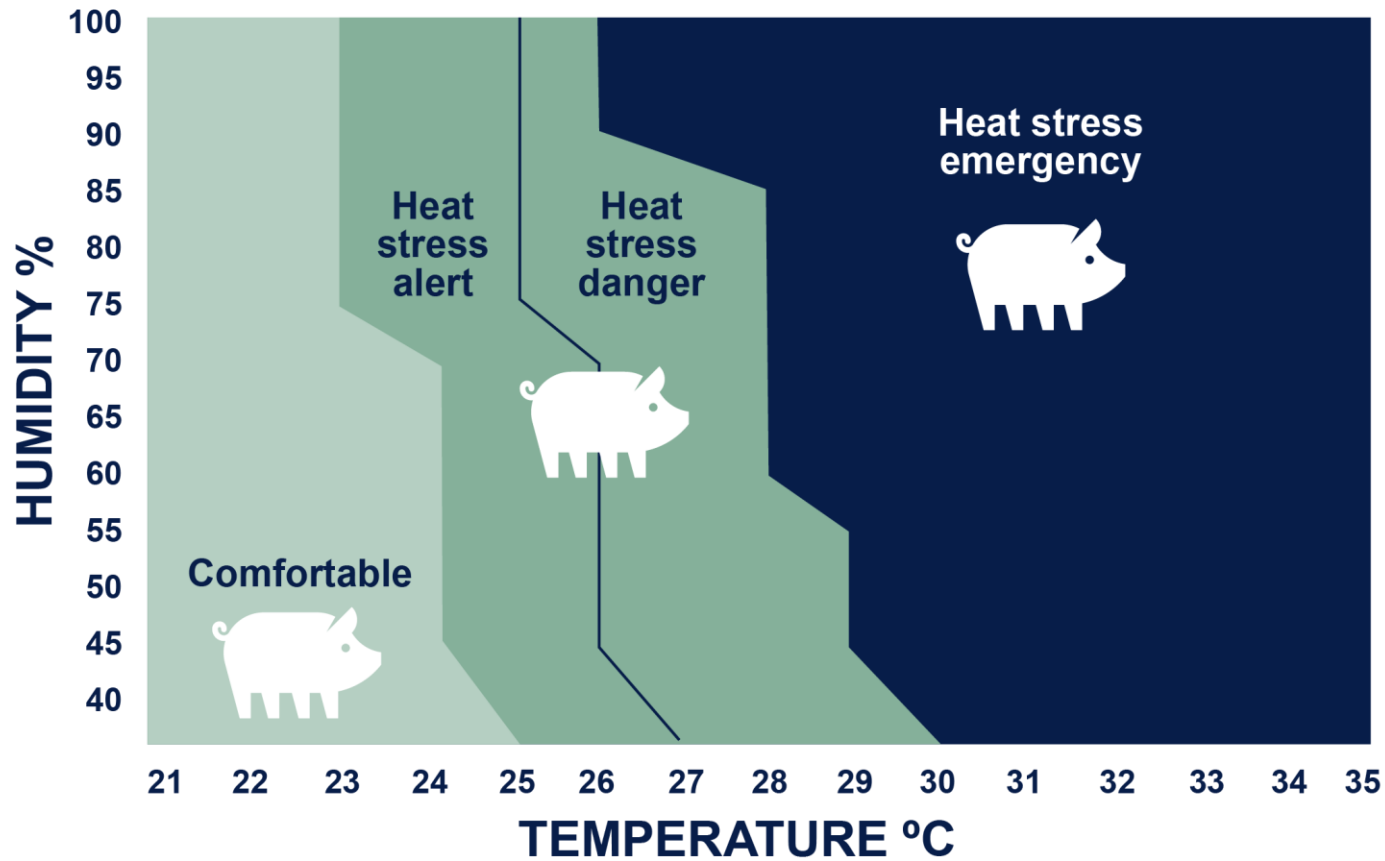
Heat stress for chickens



Heatstroke with chickens

- Chickens can't sweat
- Too much heat means a decrease in food consumption and production
- Too much humidity disables chicken to decrease their body heat by evaporation
- This could possibly lead to death from a heart attack

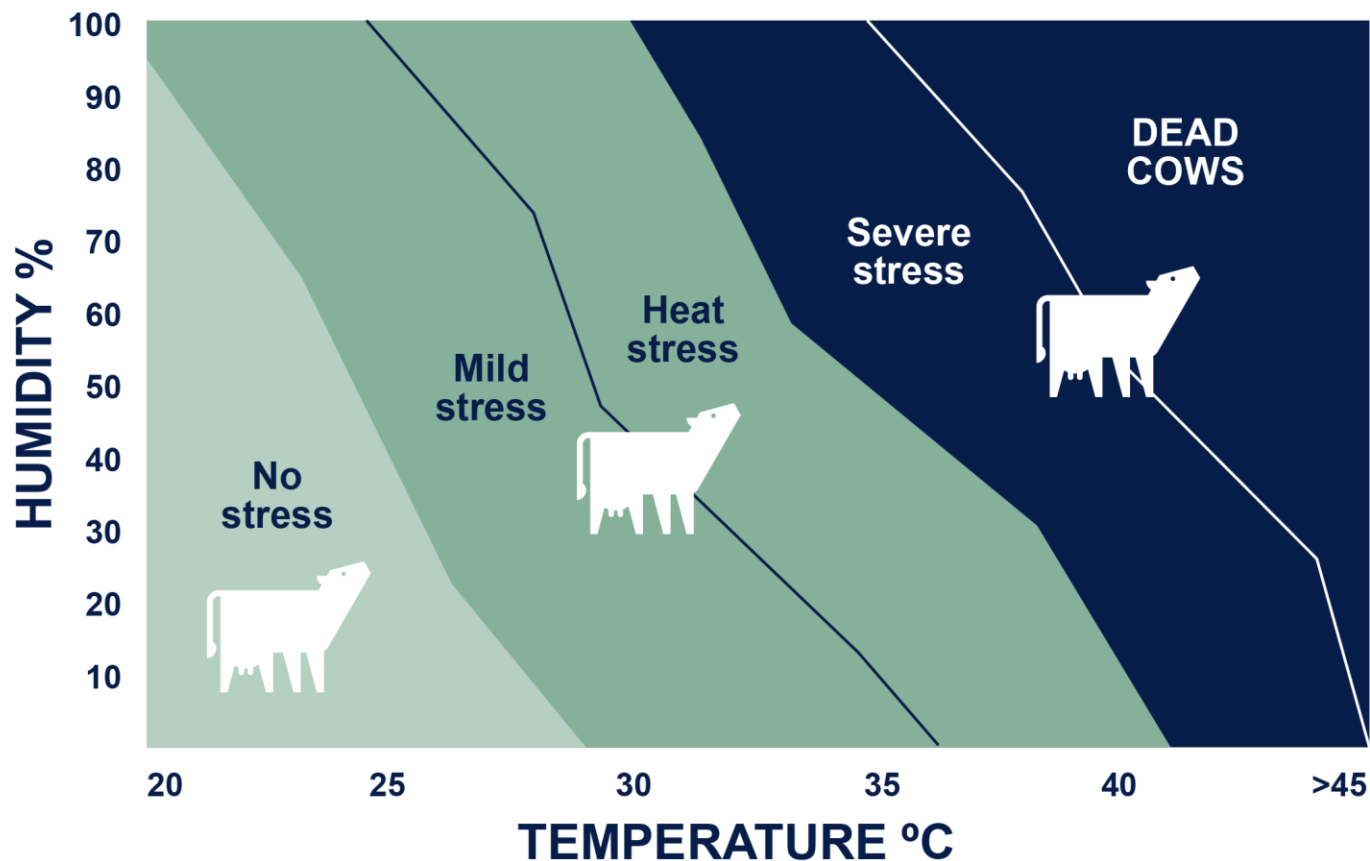
Heat stress for pigs



Heatstroke with pigs

- Pigs can't sweat
- Too much heat can lead to:
 - Stress,
 - Less activity
 - Reduced food consumption
 - Increased heart rate and breathing frequency
 - Fouling
- This could possibly lead to death from a heart attack

Heat stress for cows



Heatstroke with cows

- At temperatures above 22°C, cows are unable to dissipate their body heat effectively
- This can result in:
 - Reduced feed intake
 - Reduced milk production
 - Higher rate of diseases
 - Poor fertility
- This could possibly lead to death from a heart attack