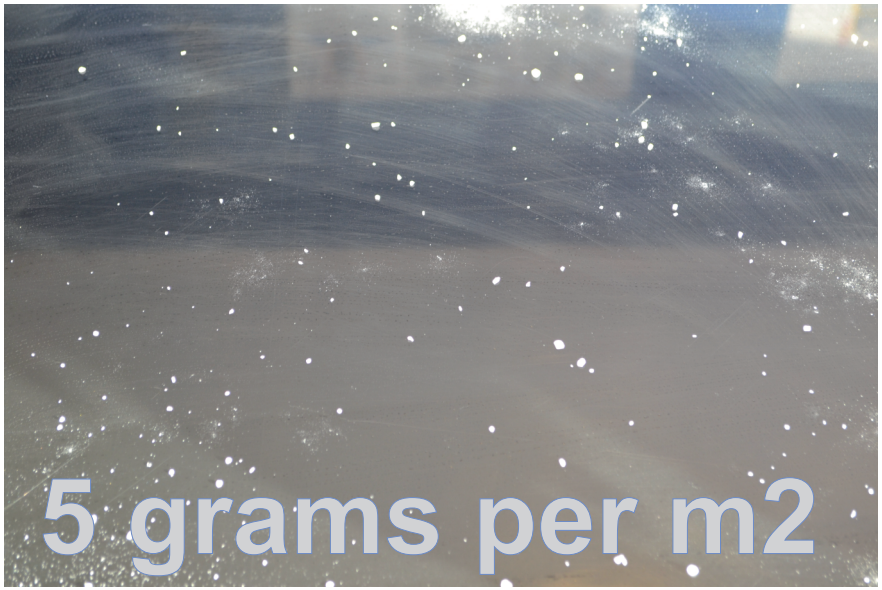
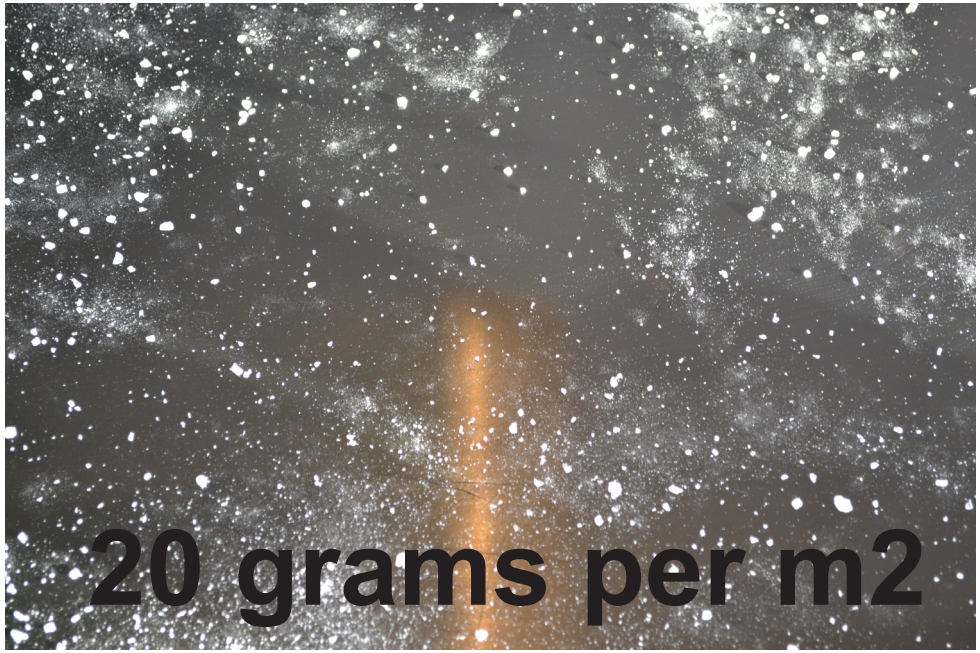
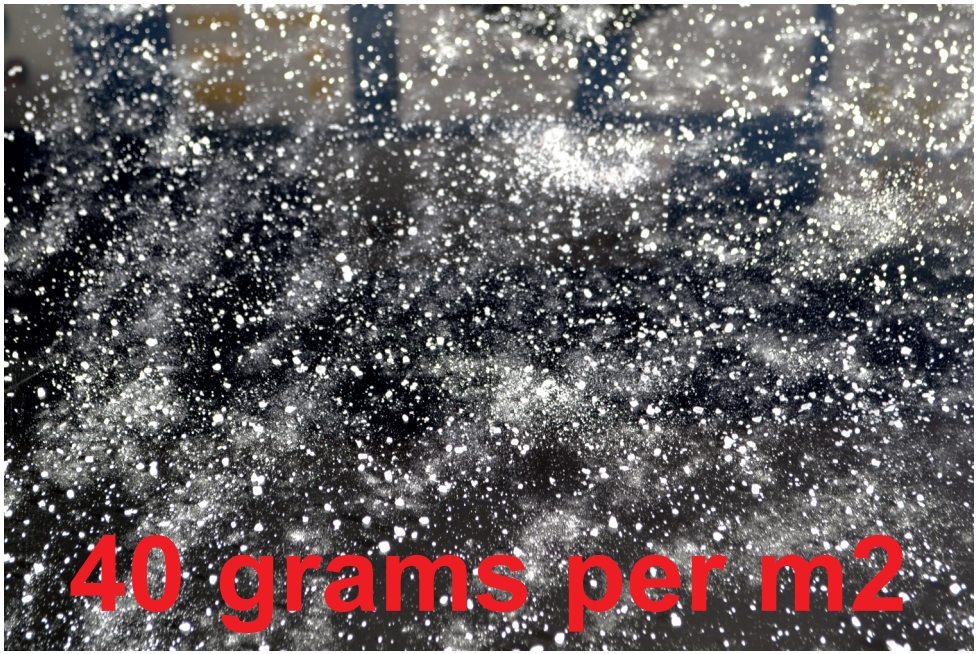
How should your trees and bushes look, when spring comes?

When choosing a method of winter road maintenance you are determining the appearance and the future of trees and bushes along the route of salting

Visual measurement







How do your sidewalks and bike paths look like after salting?

Comparison brine versus dry salt

300L brine contains 276 l. water
and 69 kg. salt.
The brine as material (viscosity)
is similar after mixing.

At 0 to - 3 degrees is 20 ml/m2 recommended

Example: 15km bike path/sidewalk:

At 20 ml/m2 is used 300 l.
which is 69 kg. salt.
A route is driven 25 times a winter.
Salt consume at the route is **1.725 kg**.

At -3 to -7 degrees 40 ml/m2 i recommended

Example: 15km bike path/sidewalk:

At 40 ml/m2 is used 600 l.
which is 138 kg. salt.
A route is driven 25 times a winter
Salt consume at the route **3.450 kg**.

Brine can not thaw snow beyond snowflakes - the brine must be properly mixed

300 kg contains 300 kg. salt
The material is very uneven
and the moisture is very fluctuating.

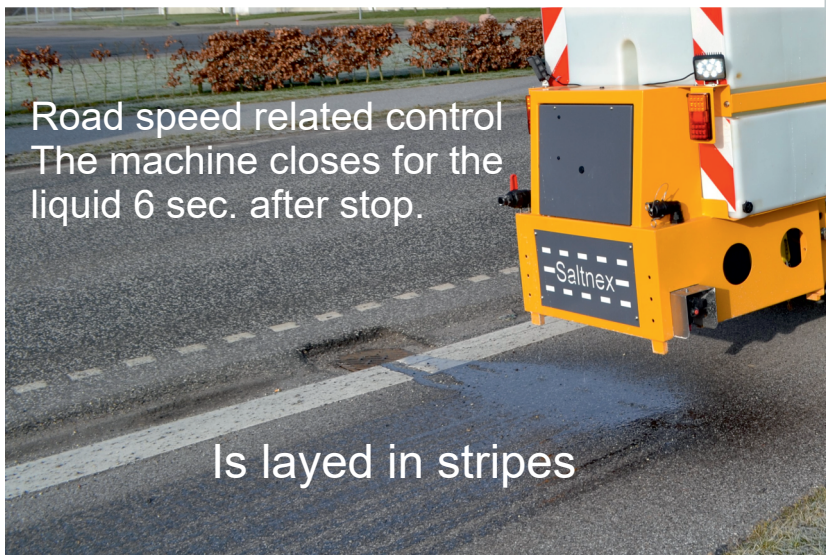
At 20 grams/m2 is used 300 kg. salt
A route is driven 25 times a winter.
Salt consume at the route is **7.500kg.**

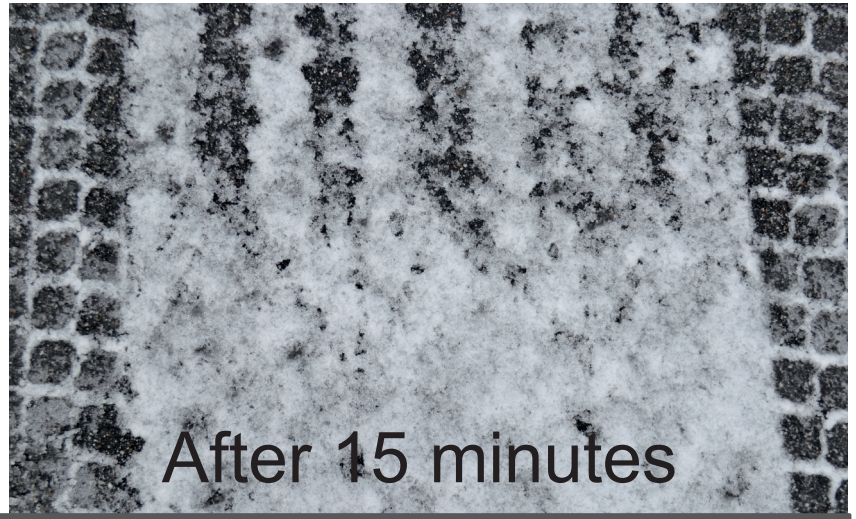
At 40 grams/m2 is used 600 kg. salt
A route is driven 25 times a winter.
Salt consume at the route is **15.000kg**.

Beyond the environmental impact - the salt is dragges into shops/offices/corridors etc.
Bicycles are damaged - pet paws are highly exposed

This is how it looks like after winter road maintenance with Saltnex liquid spreader

The liquid is placed on the substrate in stripes with small shocks.





Saltnex

Experiment - County - measurement of salt

Trafic	Weak			Strong		
Time	2 hours	5 hour	10 hours	2 hours	5 hours	10 hours
Brine	89%	69%	47%	84%	64%	42%
Moisture salt	68%	54%	38%	54%	40%	25%

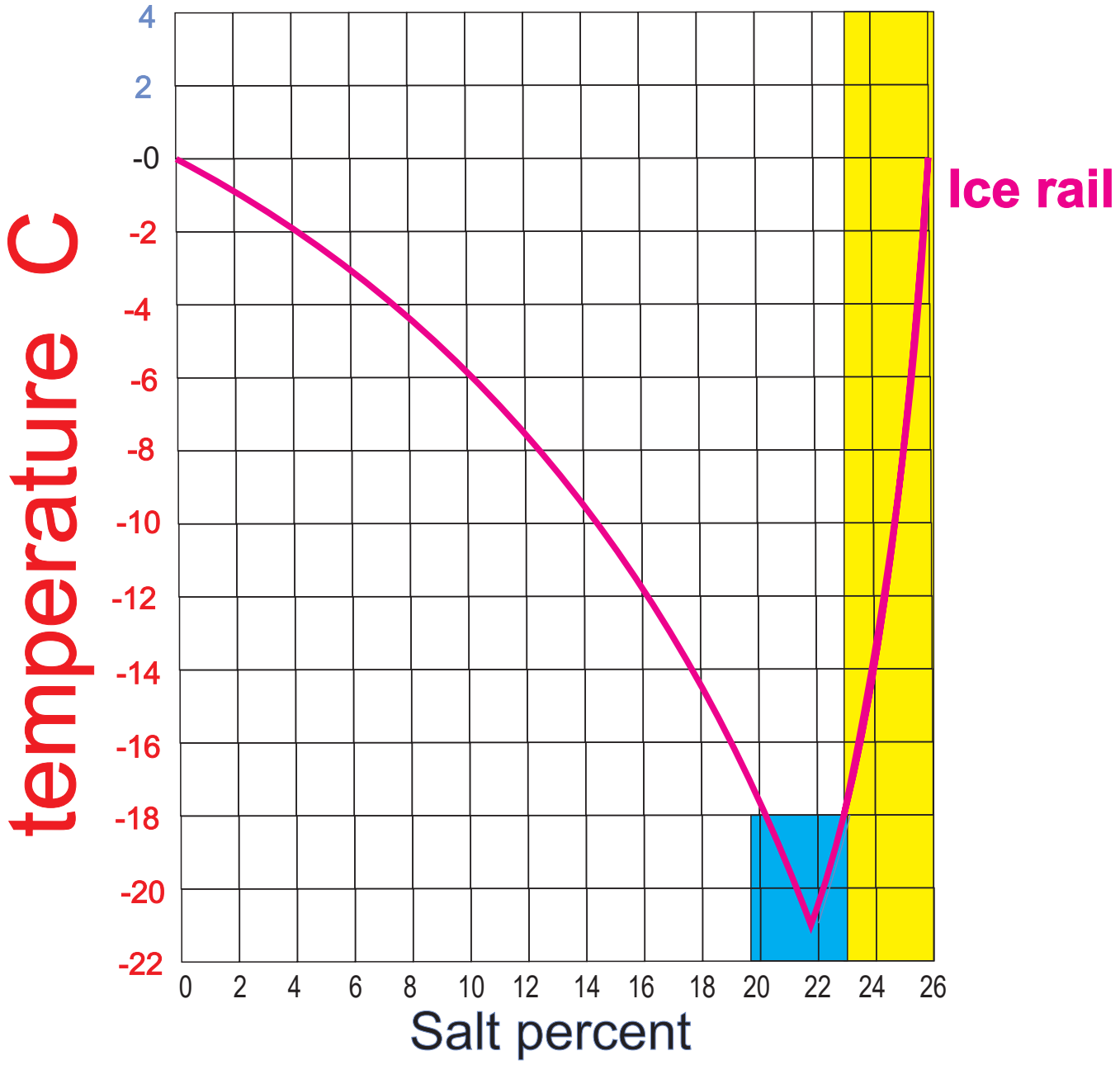
Dry salt	Experiment is not made as the salt is gone quite fast

Asphalt

The open asphalt has small holes with salt water that hold the salt for a long period.

The closed asphalt do not keep the salt in the same way

Phase diagram brine (Natriumklorid)



Choice of types and sizes of spreaders.

1. Necessary radius of action.
2. Types of vehicles (tractor - municipal implement carrier)
3. Carrying capacity of the vehicle bæreevne

Basic rules:
At temperature 0 to -3 degrees = 20 ml/m2 / from -3 and lower = 40ml/m2

At 20 ml/m2 in 1 m. spreading width = 5 km per 100 L.
By the current climate approx. 85% of all calls.
By 40 ml/m2 in 1 m. spreading width = 2,5 km. per 100L