Home Made Derust Solution

Everyone has heard how molasses dissolves rust, so make a trip to the local grocery store and get your molasses.

The formula is two litres of molasses in 7 litres of water. Put this mixture in a plastic bucket or container and partly cover to help stop evaporation. Leave for about three weeks, down by the back fence (it pongs a bit), until it ferments. It should now have a skin on the top, which should be peeled off. Now you can immerse your rusty parts in this solution. Leave for about two weeks before removing them, by then all the rust should be dissolved (use rubber gloves, long tongs, or tie pieces of wire to the parts before you start, as this mixture contains ACETIC ACID).

After removal, wash off the brown muck straight away with a stiff brush under hot running water. As soon as the parts are dry, treat them with rust converter and paint them as soon as possible, or if not painted, wire brush and oil them. This must be done immediately because surface rust will start to form as soon as the metal is dry, because it is so clean it has no protection.

Apparently the water and molasses mixture when left exposed to air, ferments and produces, amongst other things, Acetic Acid. This reacts with the oxygen in the rust and when the iron oxide (rust) is all reduced the process stops, so the steel or iron is not affected, but the surface of the metal is now virtually in original condition and subject to immediate attack by oxygen in the air and begins to rust, so must be protected.

The benefit of using molasses is that it dissolves that rock-hard rust that even wire brushes can't touch and carborundum cloth can't reach and by using arrangements of odd-shaped containers like old concrete troughs half full of dirt and lined with heavy plastic sheet, it is possible to derust larger objects that would not stand sand blasting.

This mixture will still derust for quite some time, (six months or even more).