

# Folklore or Fact?

*Lets face it, when it comes to weather, we Brits are a bit obsessed, and you can't beat some of the old weather folklore to have many of us nodding sagely.*

*But the question is.....folklore or fact?*

*RYA's weather guru Frank Singleton to help separate the supposition and superstition from the firm facts.*

Having worked as Chief Forecaster in the Met Office for many years, and having always been a keen sailor, Frank is in a privileged position to answer these questions :

**1. 'Mackerel skies and mare's tails make tall ships carry low sails'.  
Is there any truth in this saying? If so, why?**

High, small globules of cloud can have a dappled effect – like a mackerel's scales. Ahead of a warm front there is enough upwards motion for the water drops in these clouds to grow large enough to start falling and freeze.

Yes, even with temperatures as low as -40°C, small water can still be liquid. The frozen drops fall into jet stream winds with a strong wind shear, therefore they show up as a curved trail of small ice particles.

This saying does have some predictive value ie: a warm front may well be on its way. BUT, when? How strong will the winds be ahead of the front? How far will the winds back?

Yes, it is of some help but fairly limited compared with even the broad brush of the shipping forecast.

**2. 'If the rain's before the wind, then your sheets and halyards tend. If the wind's before the rain all will soon be fine again'**

The first question is a description of what happens when a frontal system approaches with rain well ahead of the front.

The strongest winds are more likely to be just ahead of the warm front and behind the cold front. The second relates to the gusts of wind from a downdraught in a shower cloud.

Such rain and wind is short-lived and the rain may give the impression of killing the wind. Sometimes true.

The second situation is a very short term forecast and probably fairly obvious when you see the large cumulo-nimbus clouds. Like the Mackerel Sky and Mare's tails, the first is a rather indefinite forecast.

**3. 'Quick rise after low foretells a stronger blow.'.....what is the theory behind this?**

Remember that it is often the rise in pressure behind a cold front that is followed by strong winds just as much or more than the fall ahead of the cold front.

True enough, but, by the time you see the rise of pressure the strong winds are likely very shortly afterwards. Watching the forecasts, especially the extended outlooks on NAVTEX or the free GRIB services such as from MailASail and UGrib will more likely give two, three or even four and occasionally five days warning of strong winds.

#### **4. A backing wind says storms are nigh, veering winds will clear the sky.....any truth in this? If so, why?**

Ahead of a warm front, as you probably learned in your RYA Yachtmaster course, the wind will back from W or NW to SW, S and even SE. This can be a good predictor although not all backing winds will presage a warm front.

Like much weather lore it can help amplify a forecast rather be a forecasting tool in its own right. There is no indication of how strong winds will become, nor when. As a cold front passes, winds will veer from a SW'ly point ahead of the front to NW behind.

So, in this case, the wind veer will be as or after the front has passed. In other words, the cold front clearance will be happening or will have happened. Further behind the cold front, showers are likely to develop so that the clearing skies will be interrupted by showers, perhaps with thunder. Not such a reliable indicator.

#### **5. The higher the clouds the better the weather.**

It all depends on what type of cloud. If there is cumulus cloud, those nice little woolpacks, and the bases are high – around 4000 feet or more, then rain is unlikely. Similarly, if the cloud is of a mackerel appearance with no mare's tails, then again, it looks set fair.

Ahead of a warm front, however, you will almost always see high cirrus cloud spreading across the sky. It will be high but be a fore-runner of rain some hours later.

#### **6. When halo rings the moon or sun, rain's approaching on the run.**

As the cirrus ahead of a warm front spreads across the sky it often becomes a high uniform layer of cloud known in the trade as cirro-stratus. Such cloud consists of ice crystals, mostly hexagonal plates.

In a similar way to a rainbow being formed as light passes through water drops, light passing through these ice particles is split into the colours of the spectrum. Because of the different geometry, haloes

almost always subtend an angle of 22.5 degrees while rainbows have an angle of 45 degrees, ie they are twice as big.

Cirrostratus can create several varieties of halo and these sometime intersect to create 'mock suns'. These will be either side of the real sun on the 22.5 degree halo.

## **Conclusion**

**Old Wives** and **Old Sailors** sayings have varying degree of truth; they are based on experience. However, forecasting has come a long way since these were all that the sailor had to warn him of bad weather.

Use them for fun to compare with the professional forecast. One day you may be out there with a flat battery in your radio!