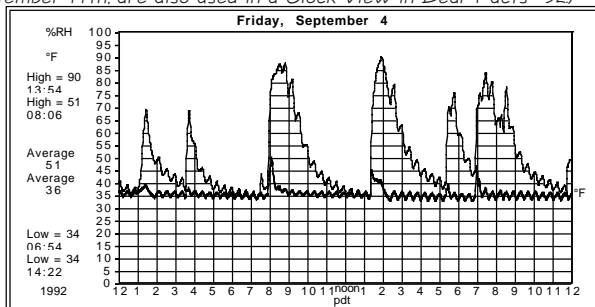
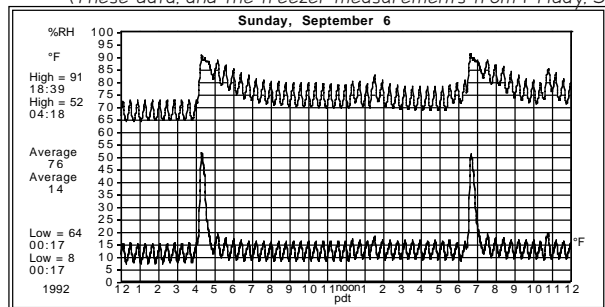


%RH: Most Recent High = 97 on Saturday, 22:06 — Low = 64 on Sunday, 01:04 — Average = 77.
°F: Most Recent High = 69 on Saturday, 22:22 — Low = 8 on Saturday, 03:10 — Average = 14.

Temperature and humidity in a side-by-side home refrigerator/freezer.
The frequent access (including midnight snacks!) is shown in both parameters.

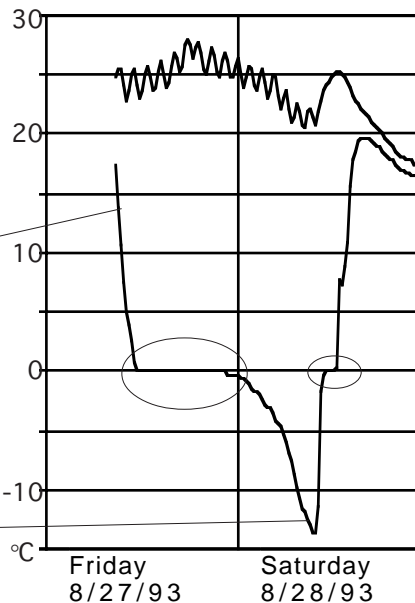
The twenty-four-hour view (left) is an expansion of the above freezer data. Measurements taken within the refrigerator show more frequent use and the same cycling (right). Again the relative humidity is a sensitive, slow-to-recover, measure of entry.

(These data, and the freezer measurements from Friday, September 11th, are also used in a Clock View in Bear Facts #32)

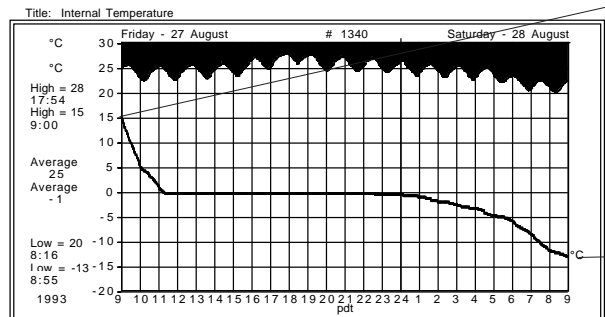


Freezing Water — A Wet Temperature Probe

To demonstrate the use of an immersible temperature sensor (Langan Part Number 1810), a probe was placed in a milk carton filled with water. This was placed in a freezer. The segment from a standard Week View (right) shows the transition from room temperature to freezing, the hours it took to freeze this half-gallon (two-liter) volume of water, and the continued cooling thereafter to adjust to the freezer's temperature. The Day View details this transition over twenty-four hours. When removed, the carton was placed in the sun, outdoors.



The lower trace is the probe in the water/ice; the period of ice slurry is circled. The top trace is a probe outside the freezer, showing the heat-exchange effect of the compressor.

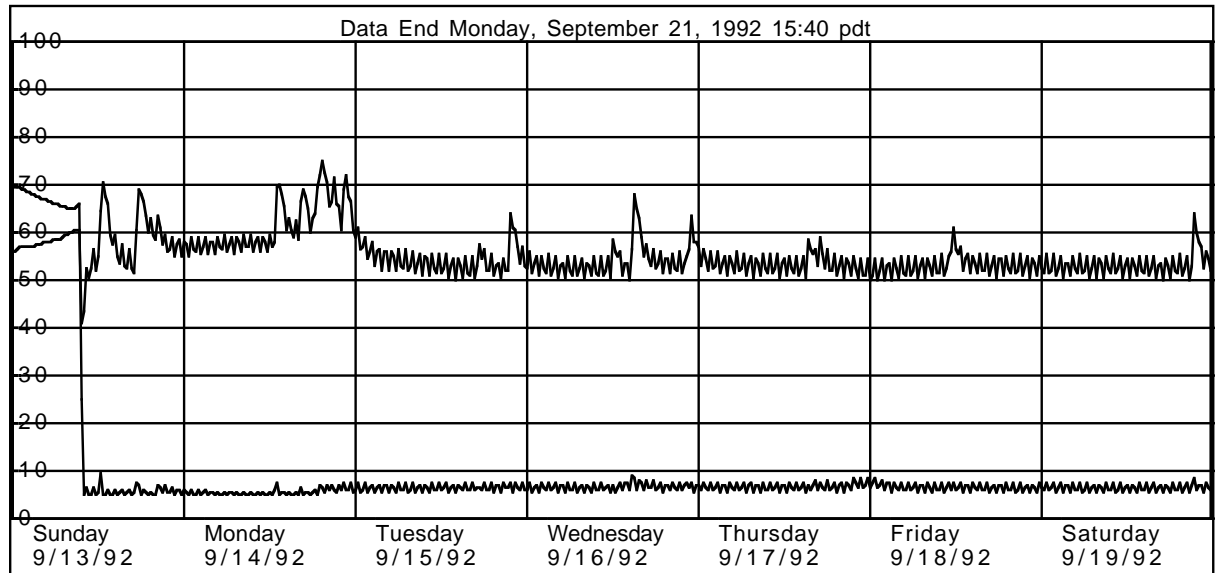


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This Bear Facts data gathered using the Langan Model 12 Electronic Hygrothermograph. By using freezers as environmental chambers, the rugged nature of the sensors is demonstrated. The sensitive response of humidity as an indicator of entry is evident.

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%RH: Most Recent High = 75 on Monday, 19:38 — Low = 36 on Sunday, 09:55 — Average = 55.
°F : Most Recent High = 70 on Sunday, 00:25 — Low = 5 on Saturday, 19:54 — Average = 10.

*These results are from a front-opening, stand-up home freezer. The environment averaged 8° F (-13° C) & 55% RH.
Access is immediately reflected in the relative humidity signal.*

Ice Cycles!

Bear Facts — #41

**Temperature and humidity were measured in two home freezers.
The results reflect the nature of the controls and the frequency of entry.**



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