# Mulberry Lea 

Plot 9 - The Hethersett ( UpAj ) - COP for $35^{\circ}$ Circulation Temperature
Actual Show House Recorded Heating and Hot Water Costs

|  |  | Weekly <br> Average Temperature ${ }^{\circ} \mathrm{C}$ | Actual Heat Pump weekly cost | Equivalent <br> Oil <br> weekly <br> cost | Equivalent <br> Gas <br> weekly <br> cost | Weekly Saving over Oil | Weekly Saving over Gas |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 days to | 23/09/2007 | 16.1 | $£ 2.07$ | £4.16 | £4.55 | $£ 2.09$ | £2.48 |
| Week ending | 30/09/2007 | 12.2 | £6.13 | £11.66 | £11.05 | $£ 5.53$ | £4.92 |
| Week ending | 07/10/2007 | 12.5 | $£ 5.26$ | £10.10 | $£ 9.95$ | £4.84 | £4.69 |
| Week ending | 14/10/2007 | 12.8 | £4.77 | $£ 9.16$ | £9.29 | £4.39 | £4.52 |
| Week ending | 21/10/2007 | 9.7 | $£ 8.46$ | £15.24 | £13.59 | £6.78 | $£ 5.13$ |
| Week ending | 28/10/2007 | 9.7 | $£ 7.95$ | £14.43 | £13.01 | £6.48 | $£ 5.06$ |
| Week ending | 04/11/2007 | 9.8 | £7.31 | £13.46 | £12.32 | £6.15 | £5.01 |
| Week ending | 11/11/2007 | 7.9 | $£ 9.13$ | £16.18 | £14.23 | $£ 7.05$ | $£ 5.10$ |
| Week ending | 18/11/2007 | 3.7 | $£ 23.32$ | £37.89 | £29.56 | £14.57 | £6.24 |
| Week ending | 25/11/2007 | 5.7 | £17.89 | £30.17 | £24.12 | £12.28 | £6.23 |
| Week ending | 02/12/2007 | 6.6 | £14.95 | £25.89 | £21.10 | £10.94 | £6.15 |
| Week ending | 09/12/2007 | 7.7 | £13.85 | £24.39 | £20.03 | £10.54 | £6.18 |
| Week ending | 16/12/2007 | 1.3 | £33.40 | £51.42 | £39.12 | £18.02 | £5.72 |
| Week ending | 23/12/2007 | 2.5 | £28.09 | £44.41 | £34.15 | £16.32 | £6.06 |
| Week ending | 30/12/2007 | 5.8 | £17.68 | £30.12 | £24.08 | £12.44 | £6.40 |
| Week ending | 06/01/2008 | 4.3 | £20.55 | £33.61 | £26.53 | £13.06 | £5.98 |
| Week ending | 13/01/2008 | 6.3 | £16.03 | £32.67 | £22.47 | £16.64 | £6.44 |
| Week ending | 20/01/2008 | 8.5 | £12.12 | £25.16 | £18.03 | £13.04 | £5.91 |
| Week ending | 27/01/2008 | 6.9 | £14.83 | £30.25 | £21.01 | £15.42 | £6.18 |
| Week ending | 03/02/2008 | 4.1 | £19.39 | £37.46 | £25.31 | £18.07 | £5.92 |
| Week ending | 10/02/2008 | 6.3 | £17.79 | £35.93 | £25.89 | £18.14 | $£ 8.10$ |
| Week ending | 17/02/2008 | 3.0 | £31.23 | £58.45 | £42.81 | £27.22 | $£ 11.58$ |
| Week ending | 24/02/2008 | 4.7 | £22.91 | £42.93 | £32.15 | £20.02 | $£ 9.24$ |
| Week ending | 02/03/2008 | 6.6 | £13.73 | £27.82 | £21.78 | £14.09 | £8.05 |
| Week ending | 09/03/2008 | 5.8 | £16.48 | £32.43 | £24.94 | £15.95 | £8.46 |
| Week ending | 16/03/2008 | 7.4 | £13.56 | £27.98 | $£ 21.88$ | £14.42 | £8.32 |
| Week ending | 23/03/2008 | 3.8 | £20.28 | £38.99 | £29.44 | £18.71 | £9.16 |
| Week ending | 30/03/2008 | 5.4 | £15.76 | £31.07 | £23.99 | £15.31 | £8.23 |
| Week ending | 06/04/2008 | 7.6 | £13.17 | £22.62 | £18.35 | $£ 9.45$ | £5.18 |
| Week ending | 13/04/2008 | 6.1 | £14.37 | £24.18 | £19.43 | $£ 9.81$ | $£ 5.06$ |
| Week ending | 20/04/2008 | 6.7 | £15.48 | £28.49 | £20.98 | £13.01 | £5.50 |
| Week ending | 27/04/2008 | 11.0 | £8.00 | £15.68 | £12.87 | £7.68 | £4.87 |
| Week ending | 04/05/2008 | 10.6 | $£ 6.41$ | £12.54 | £10.90 | $£ 6.13$ | £4.49 |
| Week ending | 11/05/2008 | 16.8 | $£ 2.44$ | £5.05 | £6.15 | $£ 2.61$ | £3.71 |
| Week ending | 18/05/2008 | 12.3 | £6.09 | £12.21 | £10.69 | £6.12 | $£ 4.60$ |
| Week ending | 25/05/2008 | 11.5 | $£ 5.51$ | £10.88 | $£ 9.85$ | $£ 5.37$ | $£ 4.34$ |
| Week ending | 01/06/2008 | 14.5 | £4.65 | £9.68 | $£ 9.00$ | $£ 5.03$ | £4.35 |
| Week ending | 08/06/2008 | 14.1 | $£ 5.27$ | £10.89 | £9.58 | $£ 5.62$ | £4.31 |
| Week ending | 15/06/2008 | 13.5 | £3.70 | £7.38 | £7.44 | £3.68 | £3.74 |
| Week ending | 22/06/2008 | 13.9 | £3.17 | £6.47 | £6.90 | £3.30 | £3.73 |
| Week ending | 29/06/2008 | 15.7 | $£ 2.81$ | $£ 5.80$ | £6.47 | $£ 2.99$ | £3.66 |
| Week ending | 06/07/2008 | 16.3 | $£ 2.20$ | £4.49 | $£ 5.67$ | £2.29 | £3.47 |
| Week ending | 13/07/2008 | 14.9 | £3.84 | £8.03 | $£ 7.82$ | £4.19 | £3.98 |
| Week ending | 20/07/2008 | 15.9 | £3.25 | £6.75 | £7.03 | £3.50 | £3.78 |
| Week ending | 27/07/2008 | 18.7 | £2.12 | £4.32 | $£ 5.59$ | £2.20 | £3.47 |
| Week ending | 03/08/2008 | 19.5 | $£ 1.93$ | £3.95 | $£ 5.34$ | $£ 2.02$ | £3.41 |
| Week ending | 10/08/2008 | 16.6 | $£ 2.97$ | £6.26 | $£ 6.76$ | £3.29 | $£ 3.79$ |
| Week ending | 17/08/2008 | 16.0 | £3.85 | $£ 8.10$ | £7.88 | £4.25 | $£ 4.03$ |
| Week ending | 24/08/2008 | 16.0 | $£ 3.75$ | £7.68 | $£ 7.68$ | £3.93 | $£ 3.93$ |
| Week ending | 31/08/2008 | 18.5 | $£ 3.72$ | £6.82 | $£ 7.36$ | $£ 3.10$ | £3.64 |
| Week ending | 07/09/2008 | 14.6 | £6.21 | £10.71 | $£ 9.71$ | $£ 4.50$ | £3.50 |

## Mulberry Lea

Plot 9 - The Hethersett (UpAj) - COP for $35^{\circ}$ Circulation Temperature
Actual Show House Recorded Heating and Hot Water Costs

|  |  | Weekly Average Temperature ${ }^{\circ} \mathrm{C}$ | Actual Heat Pump weekly cost | Equivalent Oil weekly cost | Equivalent <br> Gas <br> weekly <br> cost | Weekly Saving over Oil | Weekly Saving over Gas |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week ending | 14/09/2008 | 15.1 | £6.53 | £11.38 | £10.12 | £4.85 | £3.59 |
| Week ending | 21/09/2008 | 12.6 | £7.45 | $£ 12.46$ | £10.78 | £5.01 | £3.33 |
| Week ending | 28/09/2008 | 12.7 | £8.25 | £13.70 | £11.54 | $£ 5.45$ | £3.29 |
| Week ending | 05/10/2008 | 9.2 | £13.82 | £21.19 | £20.05 | £7.37 | £6.23 |
| Week ending | 12/10/2008 | 12.2 | £10.18 | £16.89 | $£ 16.54$ | £6.71 | £6.36 |
| Week ending | 19/10/2008 | 11.0 | $£ 13.47$ | £21.55 | £20.42 | £8.08 | £6.95 |
| Week ending | 26/10/2008 | 9.1 | $£ 16.99$ | £26.45 | £24.52 | $£ 9.46$ | $£ 7.53$ |
| Week ending | 02/11/2008 | 4.9 | £27.51 | £38.77 | £34.83 | £11.26 | £7.32 |
| Week ending | 09/11/2008 | 9.1 | £17.84 | £27.73 | £25.60 | £9.89 | £7.76 |
| Week ending | 16/11/2008 | 8.8 | $£ 20.95$ | £32.26 | £29.38 | £11.31 | £8.43 |
| Week ending | 23/11/2008 | 5.8 | £28.49 | £40.35 | £36.16 | £11.86 | £7.67 |
| Week ending | 30/11/2008 | 5.1 | £30.54 | £43.53 | £38.81 | £12.99 | £8.27 |
| Week ending | 07/12/2008 | 2.6 | £36.98 | £49.79 | £44.03 | £12.81 | £7.05 |
| Week ending | 14/12/2008 | 3.0 | £37.83 | £51.05 | £45.08 | £13.22 | £7.25 |
| Week ending | 21/12/2008 | 6.7 | £25.99 | £38.28 | £33.79 | £12.29 | £7.80 |
| Week ending | 28/12/2008 | 4.7 | £37.90 | £52.66 | £44.28 | £14.76 | £6.38 |
| Week ending | 04/01/2009 | 0.0 | £44.20 | £56.09 | £47.00 | £11.89 | £2.80 |
| Week ending | 11/01/2009 | 0.6 | £45.99 | £58.60 | £48.98 | £12.61 | £2.99 |
| Week ending | 18/01/2009 | 5.4 | £25.71 | £36.97 | £31.82 | £11.26 | £6.11 |
| Week ending | 25/01/2009 | 3.6 | $£ 29.98$ | £41.46 | £35.38 | £11.48 | £5.40 |
| Week ending | 01/02/2009 | 2.9 | £34.72 | £46.86 | £39.65 | £12.14 | £4.93 |
| Week ending | 08/02/2009 | 0.3 | £46.25 | £58.80 | £49.14 | £12.55 | £2.89 |
| Week ending | 15/02/2009 | 2.0 | £36.24 | £47.89 | £40.49 | £11.65 | £4.25 |
| Week ending | 22/02/2009 | 7.3 | £20.41 | £30.59 | £26.75 | £10.18 | £6.34 |
| Week ending | 01/03/2009 | 7.8 | £19.98 | £30.20 | £26.43 | £10.22 | £6.45 |
| Week ending | 08/03/2009 | 5.5 | £24.14 | £34.47 | £29.82 | £10.33 | £5.68 |
| Week ending | 15/03/2009 | 7.3 | $£ 20.15$ | £30.13 | $£ 26.38$ | £9.98 | £6.23 |
| Week ending | 22/03/2009 | 7.3 | $£ 19.04$ | £28.69 | $£ 25.23$ | £9.65 | $£ 6.19$ |
| Week ending | 29/03/2009 | 6.7 | $£ 21.74$ | £32.14 | £27.97 | £10.40 | £6.23 |
| Week ending | 05/04/2009 | 8.6 | £14.64 | £23.41 | £21.04 | £8.77 | £6.40 |
| Week ending | 12/04/2009 | 10.7 | £12.23 | £20.41 | £18.67 | £8.18 | £6.44 |
| Week ending | 19/04/2009 | 11.0 | £12.72 | £21.28 | $£ 19.36$ | £8.56 | £6.64 |
| Week ending | 26/04/2009 | 11.5 | £10.38 | £17.56 | £16.40 | £7.18 | £6.02 |
| Week ending | 03/05/2009 | 10.4 | $£ 9.67$ | £11.19 | £14.32 | £1.52 | £4.65 |
| Week ending | 10/05/2009 | 12.5 | £8.29 | £10.17 | £13.12 | £1.88 | £4.83 |
| Week ending | 17/05/2009 | 12.1 | £8.62 | £10.45 | £13.45 | £1.83 | £4.83 |
| Week ending | 24/05/2009 | 13.0 | £6.52 | £8.29 | £10.97 | £1.77 | £4.45 |
| Week ending | 31/05/2009 | 14.9 | £3.91 | $£ 5.67$ | £7.91 | £1.76 | £4.00 |
| Week ending | 07/06/2009 | 12.6 | £1.06 | £2.62 | £4.31 | £1.56 | £3.25 |
| Week ending | 14/06/2009 | 14.1 | £4.35 | £6.06 | £8.36 | £1.71 | £4.01 |
| Week ending | 21/06/2009 | 14.8 | £4.67 | £6.48 | £8.83 | £1.81 | £4.16 |
| Week ending | 28/06/2009 | 17.4 | £1.09 | £2.69 | £4.60 | £1.60 | £3.51 |
| Week ending | 05/07/2009 | 19.7 | £1.94 | £3.57 | $£ 5.48$ | £1.63 | £3.54 |
| Week ending | 12/07/2009 | 15.4 | $£ 4.05$ | $£ 5.81$ | £8.07 | £1.76 | £4.02 |
| Week ending | 19/07/2009 | 17.0 | £3.69 | $£ 5.50$ | $£ 7.72$ | £1.81 | £4.03 |
| Week ending | 26/07/2009 | 16.6 | £4.08 | £5.92 | £8.21 | £1.84 | £4.13 |
| Week ending | 02/08/2009 | 15.5 | £4.30 | £6.11 | £8.43 | £1.81 | £4.13 |
| Week ending | 09/08/2009 | 18.8 | £3.18 | £4.98 | £6.84 | £1.80 | £3.66 |
| Week ending | 16/08/2009 | 18.6 | £3.12 | £4.89 | £7.00 | £1.77 | £3.88 |
| Week ending | 23/08/2009 | 18.5 | £3.22 | £5.00 | $£ 7.11$ | £1.78 | £3.89 |
| Week ending | 30/08/2009 | 17.2 | £4.45 | £6.37 | £8.74 | £1.92 | £4.29 |

## Mulberry Lea

Plot 9 - The Hethersett (UpAj) - COP for $35^{\circ}$ Circulation Temperature
Actual Show House Recorded Heating and Hot Water Costs

|  |  | Weekly Average Temperature ${ }^{\circ} \mathrm{C}$ | Actual Heat Pump weekly cost | Equivalent Oil weekly cost | Equivalent <br> Gas <br> weekly <br> cost | Weekly Saving over Oil | Weekly Saving over Gas |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week ending | 06/09/2009 | 16.2 | £6.21 | £8.25 | $£ 10.92$ | £2.04 | £4.71 |
| Week ending | 13/09/2009 | 15.2 | £6.15 | £8.03 | £10.64 | £1.88 | £4.49 |
| Week ending | 20/09/2009 | 15.3 | £7.37 | £9.50 | £12.36 | $£ 2.13$ | £4.99 |
| Week ending | 27/09/2009 | 14.2 | £8.20 | £10.28 | £13.25 | £2.08 | $£ 5.05$ |
| Week ending | 04/10/2009 | 13.2 | £9.27 | £11.19 | £14.31 | £1.92 | £5.04 |
| Week ending | 11/10/2009 | 11.5 | £14.08 | £15.91 | £19.78 | £1.83 | £5.70 |
| Week ending | 18/10/2009 | 10.3 | $£ 12.56$ | $£ 14.16$ | $£ 17.75$ | £1.60 | $£ 5.19$ |
| Week ending | 25/10/2009 | 11.6 | $£ 13.41$ | £15.28 | $£ 19.05$ | £1.87 | $£ 5.64$ |
| Week ending | 01/11/2009 | 12.0 | $£ 12.19$ | £14.20 | $£ 17.79$ | £2.01 | $£ 5.60$ |
| Week ending | 08/11/2009 | 7.5 | $£ 19.45$ | £20.16 | £24.71 | £0.71 | $£ 5.26$ |
| Week ending | 15/11/2009 | 8.2 | $£ 17.84$ | £18.63 | $£ 22.95$ | £0.79 | $£ 5.11$ |
| Week ending | 22/11/2009 | 10.5 | $£ 13.13$ | £14.78 | £18.47 | £1.65 | $£ 5.34$ |
| Week ending | 29/11/2009 | 7.9 | $£ 20.19$ | £20.77 | $£ 25.41$ | £0.58 | $£ 5.22$ |
| Week ending | 06/12/2009 | 5.9 | $£ 22.66$ | £27.15 | $£ 27.36$ | £4.49 | £4.70 |
| Week ending | 13/12/2009 | 5.8 | $£ 23.26$ | $£ 27.70$ | $£ 27.87$ | £4.44 | £4.61 |
| Week ending | 20/12/2009 | -0.3 | £46.60 | £47.46 | £46.32 | £0.86 | -£0.28 |
| Week ending | 27/12/2009 | 1.0 | £41.17 | £43.17 | £42.33 | £2.00 | £1.16 |
| Week ending | 03/01/2010 | 1.7 | $£ 39.37$ | £42.46 | £41.65 | £3.09 | $£ 2.28$ |
| Week ending | 10/01/2010 | -2.4 | $£ 52.19$ | £50.82 | $£ 49.43$ | -£1.37 | -£2.76 |
| Week ending | 17/01/2010 | 1.8 | £33.14 | £35.94 | £35.57 | £2.80 | $£ 2.43$ |
| Week ending | 24/01/2010 | 4.0 | £26.14 | £30.14 | £30.15 | £4.00 | £4.01 |
| Week ending | 31/01/2010 | 1.7 | £36.50 | £39.26 | £38.65 | $£ 2.76$ | $£ 2.15$ |
| Week ending | 07/02/2010 | 3.2 | $£ 28.85$ | £32.54 | £32.37 | £3.69 | £3.52 |
| Week ending | 14/02/2010 | 1.8 | £33.31 | £36.12 | £35.72 | £2.81 | £2.41 |
| Week ending | 21/02/2010 | 1.2 | $£ 33.66$ | £36.06 | £35.69 | $£ 2.40$ | $£ 2.03$ |
| Week ending | 28/02/2010 | 3.8 | $£ 25.46$ | $£ 29.17$ | $£ 29.26$ | £3.71 | £3.80 |
| Week ending | 07/03/2010 | 2.2 | £32.30 | £35.31 | £34.98 | £3.01 | £2.68 |
| Week ending | 14/03/2010 | 4.1 | £23.00 | £26.42 | £26.70 | £3.42 | £3.70 |
| Week ending | 21/03/2010 | 8.7 | £14.57 | £18.74 | £19.54 | £4.17 | £4.97 |
| Week ending | 28/03/2010 | 9.4 | $£ 13.43$ | £17.68 | £18.56 | £4.25 | $£ 5.13$ |
| Week ending | 04/04/2010 | 6.8 | $£ 19.80$ | £24.21 | $£ 24.63$ | £4.41 | £4.83 |
| Week ending | 11/04/2010 | 9.0 | $£ 13.66$ | $£ 17.78$ | $£ 18.63$ | £4.12 | £4.97 |
| Week ending | 18/04/2010 | 8.8 | $£ 13.59$ | £17.65 | $£ 18.54$ | £4.06 | £4.95 |
| Week ending | 25/04/2010 | 8.9 | £11.62 | £15.13 | £16.18 | £3.51 | £4.56 |
| Week ending | 02/05/2010 | 12.1 | £8.47 | £11.93 | $£ 13.20$ | $£ 3.46$ | £4.73 |
| Week ending | 09/05/2010 | 8.4 | £12.81 | $£ 16.63$ | £17.58 | £3.82 | £4.77 |
| Week ending | 16/05/2010 | 8.5 | £11.51 | £14.94 | £16.00 | £3.43 | £4.49 |
| Week ending | 23/05/2010 | 15.5 | £4.62 | £7.09 | £8.68 | $£ 2.47$ | £4.06 |
| Week ending | 30/05/2010 | 13.1 | £6.42 | £9.43 | £10.84 | £3.01 | £4.42 |
| Week ending | 06/06/2010 | 14.8 | $£ 5.44$ | £8.20 | $£ 9.71$ | £2.76 | £4.27 |
| Week ending | 13/06/2010 | 14.6 | $£ 6.18$ | £9.27 | £10.71 | £3.09 | £4.53 |
| Week ending | 20/06/2010 | 11.4 | £7.37 | £10.50 | £11.85 | £3.13 | £4.48 |
| Week ending | 27/06/2010 | 18.4 | $£ 2.40$ | £4.27 | £6.05 | £1.87 | £3.65 |
| Week ending | 04/07/2010 | 19.8 | £1.96 | £3.65 | $£ 5.46$ | £1.69 | £3.50 |
| Week ending | 11/07/2010 | 19.6 | £1.96 | £3.60 | $£ 5.42$ | £1.64 | $£ 3.46$ |
| Week ending | 18/07/2010 | 17.7 | £2.05 | £3.71 | $£ 5.53$ | £1.66 | £3.48 |
| Week ending | 25/07/2010 | 19.1 | £1.99 | £3.68 | $£ 5.51$ | £1.69 | £3.52 |
| Week ending | 01/08/2010 | 17.5 | £1.97 | £3.63 | $£ 5.46$ | £1.66 | £3.49 |
| Week ending | 08/08/2010 | 16.2 | $£ 2.06$ | £3.77 | $£ 5.58$ | £1.71 | £3.52 |
| Week ending | 15/08/2010 | 16.1 | £2.05 | £3.73 | $£ 5.54$ | £1.68 | £3.49 |
| Week ending | 22/08/2010 | 17.5 | £1.89 | £3.53 | $£ 5.35$ | £1.64 | £3.46 |
| Week ending | 29/08/2010 | 14.6 | $£ 2.18$ | £3.86 | $£ 5.67$ | £1.68 | £3.49 |

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Plot 9 - The Hethersett (UpAj) - COP for $35^{\circ}$ Circulation Temperature
Actual Show House Recorded Heating and Hot Water Costs

|  | Weekly Average Temperature ${ }^{\circ} \mathrm{C}$ | Actual Heat Pump weekly cost | Equivalent Oil weekly cost | Equivalent Gas weekly cost | Weekly Saving over Oil | Weekly Saving over Gas |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week ending 05/09/2010 | 14.4 | $£ 2.03$ | £3.64 | $£ 5.46$ | £1.61 | $£ 3.43$ |
| Week ending 12/09/2010 | 15.9 | £1.97 | £3.61 | $£ 5.43$ | £1.64 | $£ 3.46$ |
| Week ending 19/09/2010 | 13.0 | £8.03 | £11.41 | £12.70 | £3.38 | £4.67 |
| Week ending 26/09/2010 | 13.5 | £10.22 | £14.36 | £15.46 | £4.14 | $£ 5.24$ |
| Week ending 03/10/2010 | 13.3 | $£ 9.54$ | £13.64 | $£ 14.78$ | $£ 4.10$ | $£ 5.24$ |
| Total 10.2 |  | £2,278.73 | £3,261.90 | £3,051.23 | £983.17 | £772.50 |
| Saving in running costs by using Air Source Heat Pump(ASHP) |  |  |  |  | 30.1\% | 25.3\% |
| First 52 Weeks | 10.3 | £573.81 | £1,056.25 | £856.73 | £482.44 | £282.92 |
| Second 52 Weeks | 10.2 | £865.20 | £1,227.30 | £1,142.93 | £362.10 | $£ 277.73$ |
| Second 52 Weeks | 9.9 | £819.96 | £950.35 | £1,021.33 | £130.39 | £201.37 |
| Total Carbon Dioxide emission to date |  | kg | kg | kg | $\mathrm{CO}_{2}$ saving | $\mathrm{CO}_{2}$ saving |
|  |  | 9,270 | 21,404 | 17,025 | 12,134 | 7,755 |
| Air Source Heat Pump(ASHP) total Carbon footprint reduction to date |  |  |  |  | 56.7\% | 45.6\% |

