

## *July—September 2024 Magazine*

Welcome to the July — September 2024 edition of our Magazine. This issue runs from 1st July to 30th September 2024.

Reports include:

- July SNATTs Meeting, Friday 12th July

There were few meetings to report on in August as some of the groups took a holiday.

Last update: 25th August 2024



Jayne Jones, Chair of Heart of England u3a.  
August 2024 Monthly Meeting on Thursday 1st August

She was presented with a floral bouquet to commemorate her resignation as Chair. This is due to a house move out of the area, occasioned by her family moving back to Lyme Regis where she has some new grandchildren..

**Science, Nature and All Things Technical Group**  
**Friday 12th July 2024**  
**Sound Recording—History and Technology**  
**Stewart Wallace**

The early title for this talk by Stewart Wallace, Musical Director of the HoE u3a Choir was Frequency Modulation. However, he always intended to tell us about the history and technology of sound recording.

He has always been interested in music, its production, the instruments for producing music and the recording of music. In our lifetime we have been witness to records—10"-12" (78 rpm), 7" (45rpm), 12" (33rpm).

The first 2 formats were used mainly for single songs/tunes and the latter 33 rpm disks for albums containing several songs/tunes on each side of the disk.

From about the 1880s to the end of WW1 the Edison waxed cylinder mechanism was popular in the USA and the UK. However, the quality of music reproduction was poor and the cylinders were fragile.

10" and 12" Shellac disks became popular as the sound reproduction was better and the disks rather more robust during the early part of the century.

The 12" vinyl disk which played at 33 1/3 rpm was released by RCA Victor in September 1948 and would play 20 minutes of music. The sound quality was much improved over the Shellac records and was suitable for high quality orchestral music.

The 7" vinyl disk was released by RCA Records in 1949 and rapidly became popular with the public. They were cheaper, more

robust and gave much better sound reproduction than the earlier shellac disks. They were ideal for a single song or tune. They were usually issued with an A side of what the record company thought would be a popular song and a B side of a less noteworthy song

In the 1950s, technology had developed to the point where stereo recordings were ready to be enjoyed on a mass scale. Label RCA revolutionised records by putting out the first stereo LP on vinyl in 1958, starting a wave in shifting consumer tastes. The home audio equipment boom of the 1960s and 1970s further cemented stereo as the dominant listening format for audiences as we know it. A British firm produced over a million record players in several models under the brand name 'Dansette'. It was very popular between 1952 and 1969 when competition from Japan and China increased.

Recorded music went onto a tape medium when Philips started to produce a cassette tape system in 1963. The cassette was quite small and played at the slow speed of 4.76 cm/second, which was not fast enough for good quality sound reproduction. However, it was adequate and the playback equipment was small and convenient, and could be fitted into automobile dashboards for entertainment in cars on the move. Personal players, battery operated, were also possible.

**The compact disc (CD) is a digital optical**

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The compact disc (CD) is a digital optical disc data storage format that was co-developed by Philips and Sony to store and play digital audio recordings. It uses the Compact Disc Digital Audio format which typically provides 74 minutes of audio on a disc. This format has captured pretty well all of the market now for both popular and classical music, although in recent years, vinyl records have become more sought after and limited production has restarted.

The market continues to move on and digital file downloads are now a very popular way of obtaining music to play in the home.



Early gramophone with large horn



Edison Wax Cylinder Player

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Gramophone with small horn



Dansette Record Player