

Storage, care, and preservation of Sound Recordings:

A Bibliography

by

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Anderson, William. "Cleanliness is Next to Noiselessness." Stereo Review 32, June 1974, p. 6.

Brief, not particularly useful notes on record care.

Barlow, D. A. "Indentation and Scratch Hardness of Plastics." Journal of Engineering Materials and Technology 95, October 1973, p. 243-51.

Study of theoretical models for determining vinyl hardness. Results of laboratory tests. Vinyl co-polymers show considerable work-softening.

Barnes, Ken. "The Spirit of 78." Antique Phonograph Monthly, January 1975.

Directions for care, including washing, of early recordings. Discwasher brush and special cleaning fluid for 78s is recommended. Bans waxing of cylinders.

Blacker, George and Long, Robert. "How to Play Old Records on New Equipment." High-Fidelity 23, April 1973, p. 48-57.

Consumer oriented but detailed, useful article on the subject. Includes a stroboscopic disc for pitching.

Blackmer, David E. "A Wide Dynamic Range Noise-Reduction System." db, August-September 1972, p. 54-56.

Description of the dbx noise reduction system with information on tape noise.

Bogantz, G. A. (with Khanna, S.K.) "Development of Compound for Quadrads." Journal of the Audio Engineering Society 23, January-February 1975, p. 27-32.

Considerations in the development of a high wear resistant vinyl compound. Much useful related information.

Bubbers, John J. "What You Can Do To Minimize Record Wear." High Fidelity 22, September 1972, p. 54-55.

Interesting facts on tracking force as related to record wear.

Canby, Edward Tatnall. "Latter-day Gadgetry." Audio 55, November 1971, p. 56+

Perfunctory discussion of disc cleaning devices, including Dust Bug, Discwasher, Syantific Audio Cleaning Machine.

Comstock, D. E., et al. "Dropout Identification and Cleaning Methods for Magnetic Tape." Journal of the Audio Engineering Society 22, September 1974, p. 511-20.

Factors responsible for tape performance degradation with analysis of different rehabilitation methods.

Cook, Warren. "Paper and Plastic." Record Exchanger 3, number 4; 4, numbers 1, 4 and 5. [n.d.]

Excellent four-part article on record manufacture and preservation techniques, aimed for collectors of rock-and-roll 78s and 45s. Clear explanations and specific recommendations. Most backed up in other sources.

Cunha, George Daniel Martin. Conservation of Library Materials; a Manual and Bibliography on the Care, Repair and Restoration of Library Materials. 2nd ed. Methuen, N.J.: Scarecrow Press, 1971. Vol I, 406 p.

Deals mainly with printed materials. Contains some information on sound recordings, though possibly misleading. References difficult to locate.

"dbx Devices." Stereophile, Summer 1975, p. 7-12.

Detailed review of dbx noise reduction equipment with comments on the Dolby system.

Eilers, Delos A. "Polyester and Acetate as Magnetic Tape Backings." Journal of the Audio Engineering Society 17, June 1969, p. 303-08.

Comparative study of physical characteristics of acetate and polyester backings.

Fantel, Hans. "A Pampered Record Can Live To Be 100." New York Times, October 10, 1976, Section D, p. 26+

A survey of recent products to clean and preserve LPs. Some interesting, though undocumented assertions on the durability of LPs.

Feldman, Leonard. "Effect of Ball Brothers' Sound Guard Lubricant on Frequency Response, Signal-to-Noise Ratio, and Harmonic Distortion Reproduced from Disc Recordings." Muncie: Ball Brothers, 1975. 36 p.

A test of Sound Guard by noted magazine writer, commissioned by the manufacturer. Feldman, whose independence must be questioned, reports favorably.

Grendysa, Peter A. "Taking Care of 78s." Record Exchanger 4, number 1, [n.d.] p. 23.

Author describes his experience washing 78s at the Milwaukee Public Library. Other methods of caring for 78s.

Hall, David. "Phonorecord Preservation: Notes of a Pragmatist." Special Libraries 62, September 1971, 357-62.

Practical measures for record preservation.

Hall, David. "The Rodgers and Hammerstein Archives of Recorded Sound—History and Current Operation." Association for Recorded Sound Collections—Journal 6, number 2, 1974, p. 17-31.

Interesting article with useful description of sound archive policy.

Happ, Larry and Karlov, Frank. "Record Warps and System Playback Performance." Journal of the Audio Engineering Society 24, October 1976, p. 630-38.

Description of optimum design parameters of tone arm system necessary to cope with record warps.

Hodges, Ralph. "Dealing with Dirty Discs." Stereo Review 32, April 1974, p. 24.

Basic rules for disc care. Specific product recommendations. Warns against soap-based liquids and silicon cloths and sprays.

Hodges, Ralph. "Record Care." Stereo Review 28, March 1972, p. 26.

Brief but good advice on record care. Explains theory of dust damage. Warns against all liquids except distilled water.

Isom, W. Rex. "How to Prevent and Cure Record Warping." High Fidelity 22, September 1972, p. 50-3.

Useful data on warping, including a restoration technique.

"Just for the Record; an Invaluable Guide for Helping You Protect, Maintain and Preserve Your Records." New Hyde Park, N.Y.: Elpa Marketing Industries, c1975. 27 p.

Essentially a new edition of earlier publications under the authorship of Cecil E. Watts. A good account of the problems of preservation and restoration, tied in with the use of Watts products.

Key, Walter. "Keynotes." Stereophile 3, number 11, Winter 1975-76, p. 29-32.

Recommends use of Water-Pik for difficult to clean records. Helpful description of stylus cleaning procedure with good troubleshooting guide for unusual playback problems, e.g. low line voltage, ageing components, defective plugs.

Khanna, S. K. "Role of Polymer Science in Developing Materials for Phonograph Discs." Journal of the Audio Engineering Society 24, July/August 1976, p. 464-69.

General discussion of polymer science and rheology (study of the deformation and flow of materials) as applied to the development of compounds for records. Article is based on work done to develop the RCA quadradisc compound. Brief section on record wear.

Loescher, F. A. "Record and Stylus: How Long Do They Last?" Gramophone 53, June 1975, p. 126+

Useful rules for record care. Author advocates use of the wet playing system.

Loescher, F. A. and Hirsch, F. H. "Long Term Durability of Pickup Diamonds and Records." Journal of the Audio Engineering Society 22, December 1974, p. 800+

Tests of the durability of diamond styli and record grooves. Experimental results of wet playing vs. dry playing. Also tests on elliptical vs. spherical styli but no conclusions are drawn.

Lotichius, Dietrich. "Safety First—Essential in the Preservation of

Sound Recordings." Phonographic Bulletin 5, December 1972, p. 8-14.

Description of procedures and safety measures at the German National Radio Archives at Hamburg.

Maier, Bruce R. "In Search of the Perfect Record Cleanser." High Fidelity 22, September 1972, p. 52-55.

Discussion of contaminants affecting phonograph records and specifications of a good cleanser.

Meulengracht-Madsen, Hans. "On the Transcription of Old Phonograph Wax Records." Journal of the Audio Engineering Society 24, January/February 1976, p. 27-32.

Specific methods used in transcribing Maori cylinder recordings to tape. Technical details probably useful for constructing a cylinder playback device.

"On Tape." Stereophile, Autumn 1975, p. 37-9.

Wet playing technique for reducing noise in 78s. Vestigal arm is recommended for tracking warped 78s.

Pinniger, E. B. "Faults in Gramophone Records." Gramophone 52, October 1974, 790+

Interesting information on defects that can enter records during the manufacturing process.

Pickett, A. G. and Lemcoe, M. M. Preservation and Storage of Sound Recordings. Washington: Library of Congress, 1959. 74 p.

The only major study of the subject to date. Does not include information on cylinders.

Pisha, B. V. "Record Cleaners; Do They Really Work?" Audio 59, March 1975, p. 20-3.

Survey of record cleaning devices with tests. Products reviewed include VacOrec, Staticmaster 500, Discwasher, Watts Parastat, Audio Technica Rotary Disc Cleaner and Record Cleaning Kit.

"Recovering Data on Heat-damaged Tapes." Instrumentation Technology 20, December 1973, p. 45.

Restoration technique for tapes "curled" by excessive heat. Developed by NASA.

Quigley, James. "78's Live!" Audio 53, June 1969, p. 35-6.

Discussion of differing shellac surfaces and commercial dubbing techniques, especially for records of the 1930s and 40s.

"Retentivity." St. Paul, MINN.: Magnetic Audio/Visual Products Division, 3M Company [n.d.] [4p.]

Thorough, but sometimes vague, description of handling procedures for magnetic tape. Includes data on long term storage, effects of magnetic fields, winding tension, etc.

Ryan, Edmund. "My Way To Avoid Noisy Records." Gramophone 51, January 1974, p. 1485+

Simple article on cleaning techniques. The author notes that some record stores in England have record cleaning machines available for customer use!

Sank, J. R. "Biradial and Spherical Stylus Performance in a Broadcast Disc Reproducer." Journal of the Audio Engineering Society 18, August 1970, 402-06.

In terms of groove wear, Sank finds a slight advantage to the bi-radial stylus when used in the RCA BDR-1 Broadcast disc reproducer.

"Sneak Previews—Ball Sound Guard." The Absolute Sound 2, number 8, Summer/Fall 1976, p. 415-16.

Comments pro and con on Sound Guard, mostly pro. One reviewer notes that Sound Guard makes records "sound better."

Stratton, John. "Crackle." Recorded Sound 39, July 1970, p. 655+

Good article on the problem of fungal attack of 78s. Much useful information on 78s.

Welch, Walter L. "Preservation and Restoration of Authenticity in Sound Recordings." Library Trends 21, July 1972, p. 83-100.

A good article covering most phases of preservation and restoration of disc recordings and cylinders. Some of Welch's suggestions may be controversial.

Wilson, Percy. "Care of Records." Audio 56, December 1972, p. 30-32.

Description of various record care techniques, including an anti-warp procedure. Outlines the problems inherent in record washing.

Woodward, J. G. "The Scanning Electron Microscope—a New Tool in Disc-

Recording Research." Journal of the Audio Engineering Society 16, July 1968, p. 258-65.

A classic article, with excellent photographs of record wear caused by elliptical and spherical styli.

Zahn, Wilfried. "Preservation and Storage of Tape Recordings." Phonographic Bulletin 15, July 1976, p. 5-6.

Description of archival storage conditions. Discussion of print-through in terms of tape type and temperature.

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Blake, D. "Taking Care of Your Discs." Melody Maker 47, November 25, 1972, p. 34.

Feldman, L. "Record Care Breakthrough: Sound Guard Lubricant." Radio and Electronics 47, March 1976, p. 41-3+

Graham, C. "Disc Care." Downbeat 40, March 29, 1973, p. 20.

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Cyber-Tronics, Inc., 200 Boylston Ave., Newton, MASS.?

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Hobson, P. T. "Care of Magnetic Tape." Data Processing 11, November 1969, p. 576-79.

"Magnetic Recording Tape." Springfield, VA.: National Technical Information Service, 1967.

"Magnetic Tape Resists Severe Temperatures." Automation 20, November 1973, p. 7.

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———— "Record Cleaners Revisited." Audio 60, May 1976, p. 40-2.

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- "Restore Old Disks Via New Techniques." Variety 277, February 5, 1975,
p. 77.
- Robinson, R. "Cleaning Up a Dirty Groove." Creem 7, July 1975, p. 56.
- Shifrim, A. "Rx for 78s: Tape Them." Audio 58, April 1974, p. 22+
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September 1, 1971, p. 57.
- Tudor, D. "Care and Preservation of Records." Ragtimer, January/
February 1971, p. 15-6.
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American Archivist 31, number 4, 1968.
- White, J. V. "Theory of Groove Deformation in Phonograph Records."
Acoustical Society of America Journal 59, March 1975, p. 20-3.