

**Preservation of analogue audiovisual
holdings in Lithuanian Central State
Archive: practical approach to the current
problems**

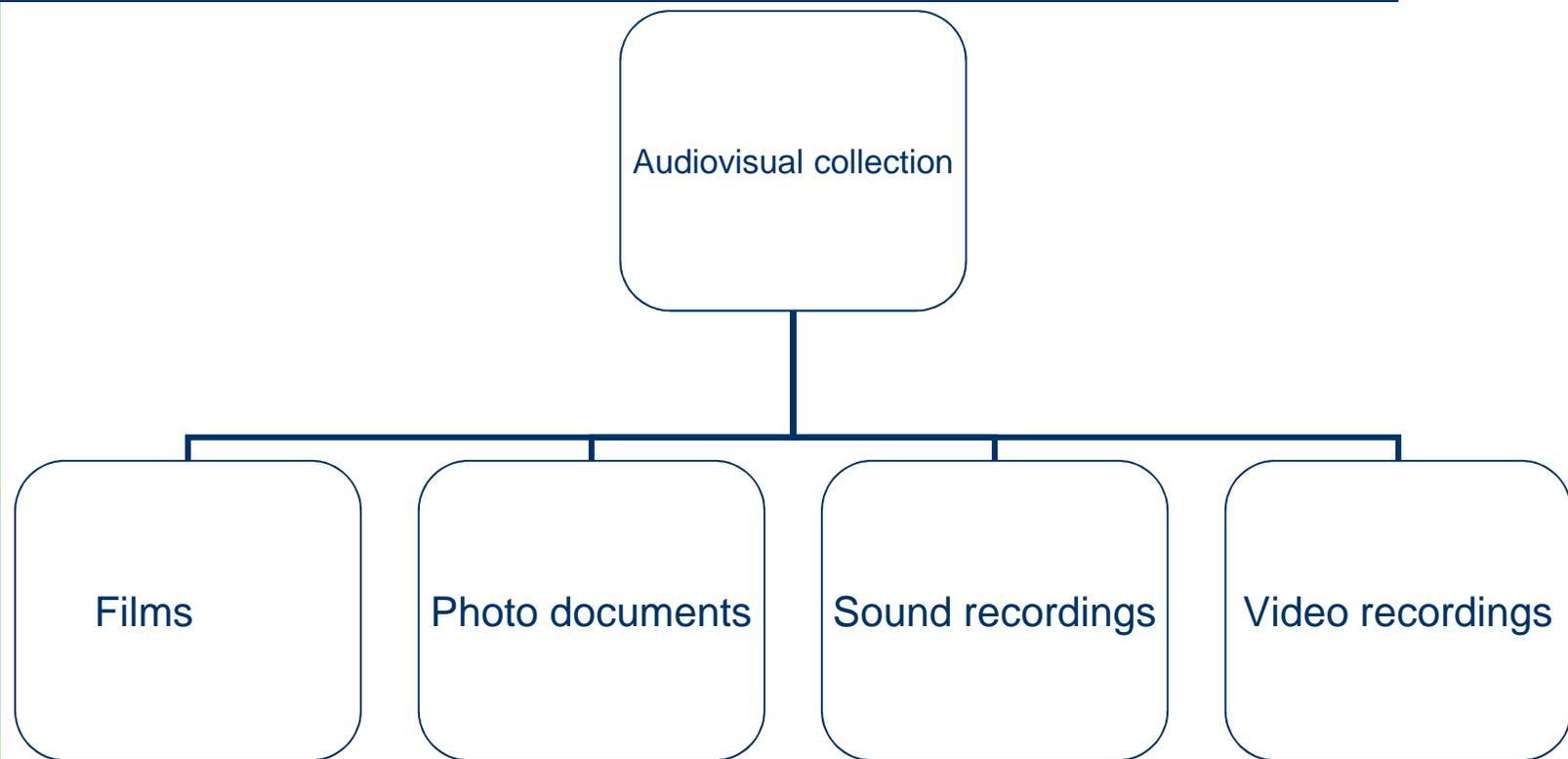
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Central State Archive



Preservation of analogue audiovisual holdings in Lithuanian Central State Archive: practical approach to the current problems

- Lithuanian Central State Archive – the biggest one within the state archival service
- The only state archive where audiovisual documents are stored
- The main mission – collecting, safeguarding, providing public access

Preservation of analogue audiovisual holdings in Lithuanian Central State Archive: practical approach to the current problems



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Control of temperature and relative humidity:

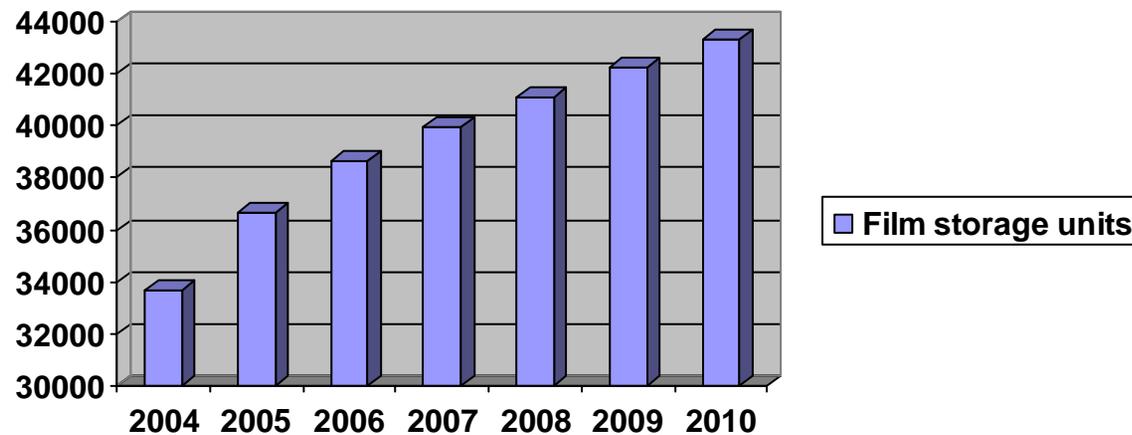
- $16\pm 2^{\circ}\text{C}$ and $45 \pm 5\%$ - photodocuments, sound and video recordings
- $12 \pm 2^{\circ}\text{C}$ and $45 \pm 5\%$ - films
- Too dry in winter and too wet in summer
- The attempts of archivists can be unsuccessful because of the abnormal weather conditions
- Any good experience dealing with this problem?

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- The main issue of the audiovisual collection's preservation policy – digitisation
- The preservation, restoration, conservation and physical condition's control of analogue audiovisual documents – sometimes the secondary matter
- Balance between digitisation and preservation of physical analogue carriers
- The number of preserved analogue audiovisual documents constantly grows
- Inevitable grow of safeguarding problems

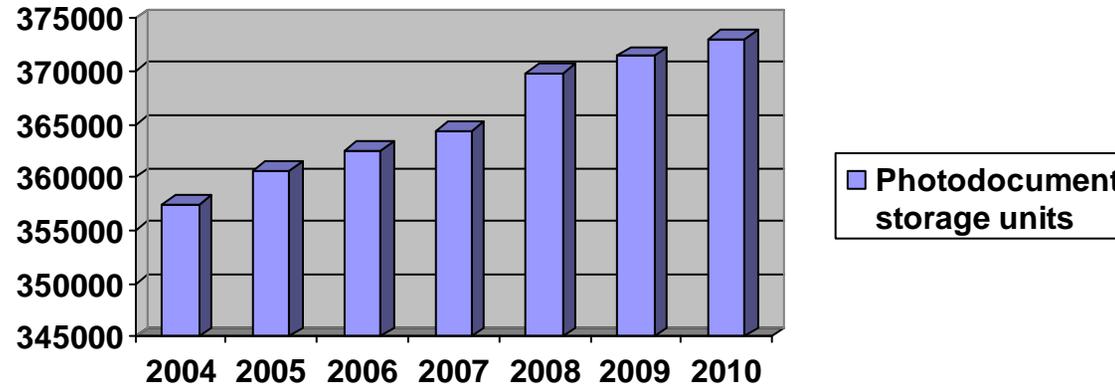
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Analog film documents



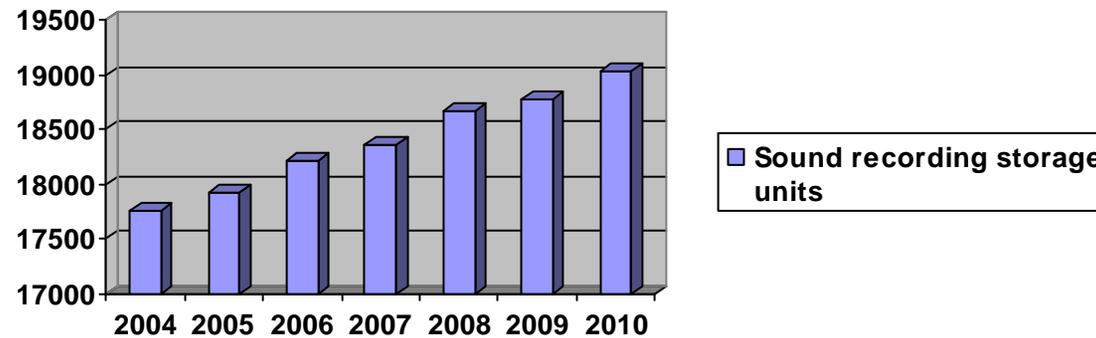
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Analogue photodocuments



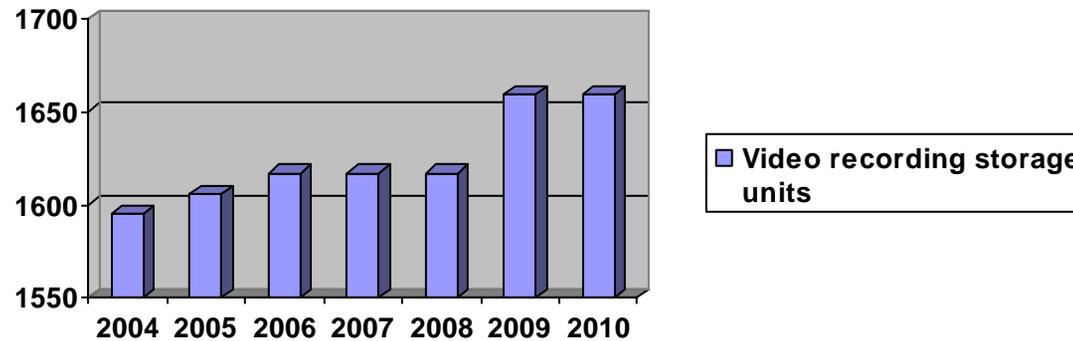
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Analogue sound recordings



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Analogue video recordings

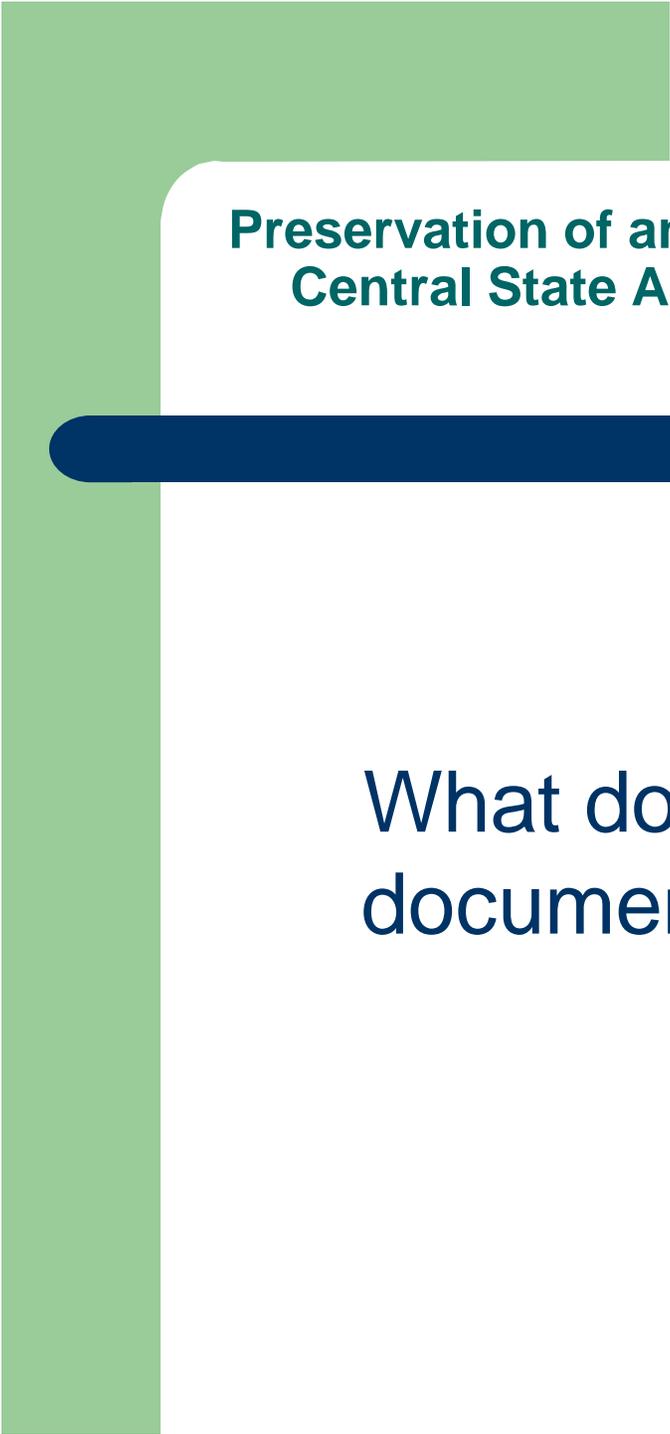


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- Increase of analogue films – almost 10.000 storage units
- Increase of analogue photodocuments – almost 16.000 storage units
- Increase of analogue sound recordings – almost 1.300 storage units
- Number of analog video recordings increased a little
- Two reasons: analogue video technologies emerged not too long ago and had been changed by digital ones

Preservation of analogue audiovisual holdings in Lithuanian Central State Archive: practical approach to the current problems

- Analogue audiovisual documents' preservation requires a lot of financial, time and human resources
- Preparation for the long time storage – more than 6.000 units of documents each year
- Since 1993 – constant control of the physical condition
- Since 2000 – conservation (additional chemical fixation) of photo negatives



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What does the preparation of the
document for the long time storage
mean?

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- Over winding of each new film tape
- Humidification of the tapes – the solution consists of 15% acetone, 25% glycerin and 60% water
- Situations when Archive's specialists couldn't lower the nitro tape shrinkage
- Any idea about the solution of this problem?

Preservation of analogue audiovisual holdings in Lithuanian Central State Archive: practical approach to the current problems

- The codification of each new photo negative
- The conservation – the solution consisting of sodium bisulphate, sodium sulphite, vinegar acid and water
- About 1.500 black-and-white photo negatives are facing the conservation each year
- Quite good results of the conservation

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- The conservation method is almost perfect
- How much you can forecast, if the chemical treatment of photo negatives doesn't cause the damages which will emerge only in the future?
- The question for thinking and discussion
- What about the conservation of color photo negatives – any experience in this sphere?

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Each photo negative is stored in special plain glassine envelopes – a very good means of storing negatives



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- Till 2009 – the envelopes are being made in the Archive
- High cost of envelopes
- No production in Lithuania
- The producer in the USA – a quite low price

Preservation of analogue audiovisual holdings in Lithuanian Central State Archive: practical approach to the current problems

- Work not only with new collected analog audiovisual documents
- The constant control of physical condition of documents is very necessary
- Nitro tapes – rewinding approximately every 3 years, acetate tapes – approximately every 6-7 years
- About 7.300 storage units – every year

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- One of the serious problems – the preservation of nitrate films
- 5.820 storage units of nitro tapes
- More and more damages from hydrolysis – we lose a part of the content
- The rise of tape shrinkage
- How to slow the natural aging of physical carriers of analogue documents and is it possible to do this?
- Is it worth to make a lot of attempts – we can safeguard the content by digitization?

Preservation of analogue audiovisual holdings in Lithuanian Central State Archive: practical approach to the current problems

- Another serious problem – a well known vinegar syndrome
- First of all the vinegar acide damages magnetic sound tapes of films
- The medium term of preservation of such tapes is 35 years
- The test of vinegar syndrome, using AD strips from Denmark enterprise Dancan
- 5.907 storage units were tested

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The period	“1” level (number/percent)	“2” and “3” level (number/percent)
1953-1967	690 units / 89%	87 units / 11 %
1968-1976	709 units / 38 %	1145 units / 62 %
1977-1995	3102 units / 95 %	174 units / 5 %

- Especially the “3” level is typical to tapes, produced in 1972-1974, i.e. before 36-38 years

Preservation of analogue audiovisual holdings in Lithuanian Central State Archive: practical approach to the current problems

- The medium term of preservation of other acetate tapes is 70 years
- The vinegar syndrome test for color film tapes from different period
- Tapes are not damaged
- How to slow down the vinegar syndrome process?
- Any successful experience in this sphere?

Preservation of analogue audiovisual holdings in Lithuanian Central State Archive: practical approach to the current problems

- Constant control of the physical condition of magnetic tapes of sound recordings
- 2.200 storage units each year
- How to kill the mould which has damaged magnetic sound tapes?
- No preventive fungicide treatment of magnetic sound tapes in Lithuania – no specialists of this sphere

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- Some tests of fungicide treatment in the Archive using chemical reagent – biphenyl
- The tapes seemed clear after the treatment
- Two reasons for not continuing this treatment
- Has the mould really disappeared?
- Biphenyl is quite dangerous
- What to do – does anyone know the answer?

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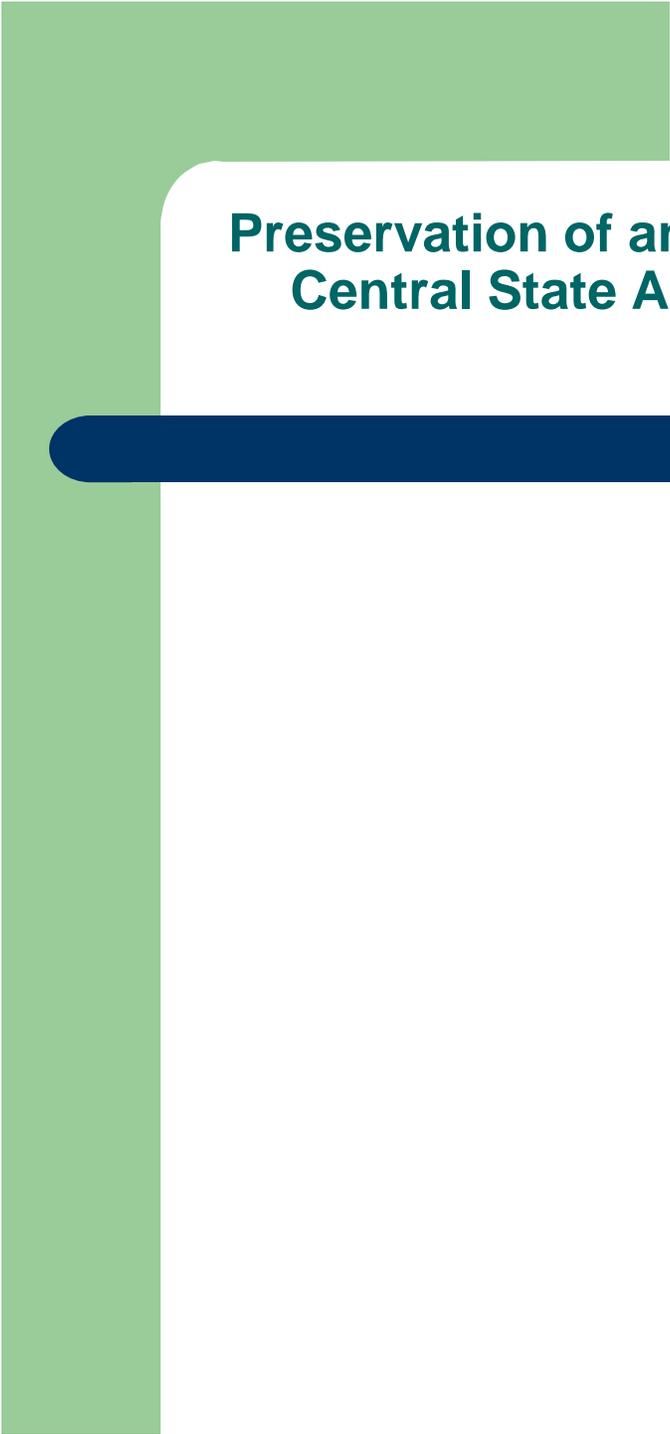
- A lot of good specialists working in the Archive
- Still one but – there is no school in Lithuania, preparing the specialists of analog audiovisual archives
- Any study program which can possibly be related to audiovisual archives or audiovisual documents?

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- Vilnius University – the bachelor degree in archival studies, but no separate study programs about audiovisual matters
- Vilnius Art Academy – preparation of photography and media art specialists, almost not related to the analog audiovisual archives
- Vilnius College of Technologies and Design – the specialists of photographic technology are prepared, it is related to analogue photo documents

Preservation of analogue audiovisual holdings in Lithuanian Central State Archive: practical approach to the current problems

- Does Lithuania really need specialists of analogue audiovisual archives?
- The often answer – Lithuania is small, all can be digitized, etc.
- Won't the Archive miss some human resources and the qualified specialists for the preservation works in the future?



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Questions?

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Thank You for the attention!

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