

BIODEGRADATION IN MUSEUM COLLECTIONS

Status in Croatian museums





We like false outside glare cosmetics



hm

Potemkin?



Example 2

Storage?





Example 3





Example 4



Photo: courtesy of Croatian Conservation Institute, Zagreb

Church collection



Photos: courtesy of Croatian Conservation Institute, Zagreb

Church collection



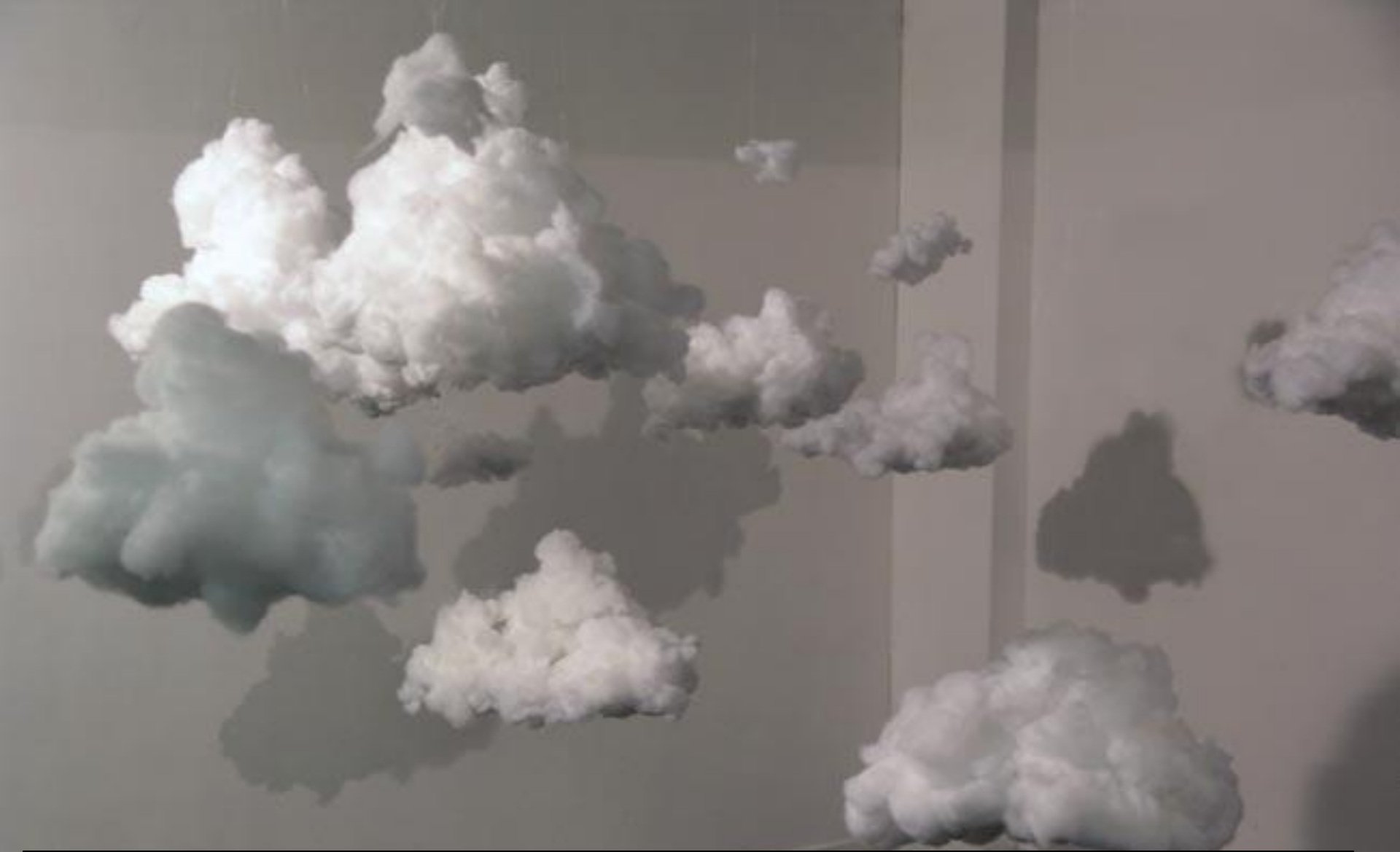
Interesting situations
often occurring in
custodies



If a situation like this occurs in a museum building...



Or like this...



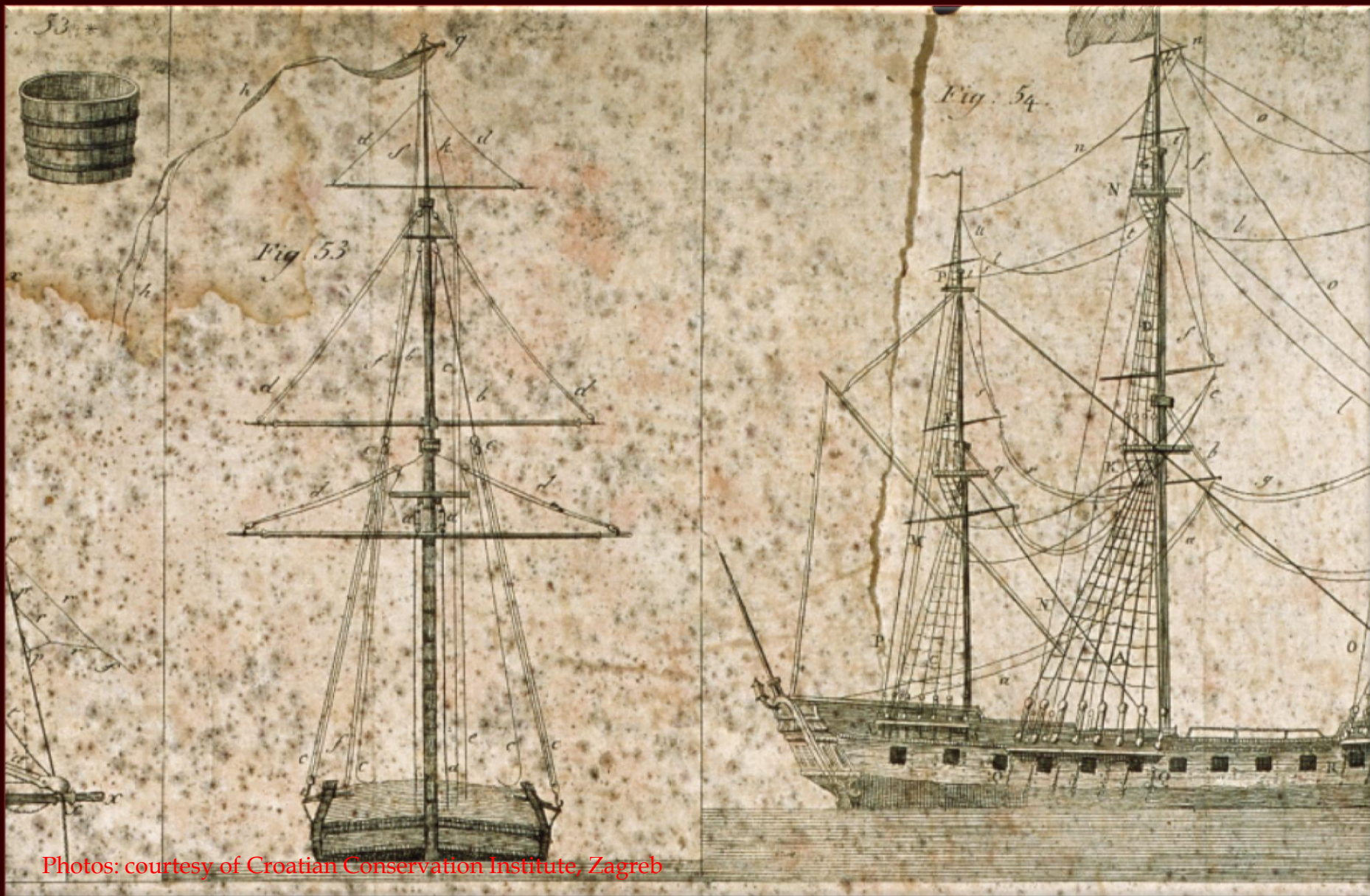
High relative humidity will prevail entailing moulds, fungi and increased insect activity



High relative humidity:
Wrinkling of paper
followed by moulds
and fungi



moulds



Photos: courtesy of Croatian Conservation Institute, Zagreb

Change of appearance



White postament will end up like this when exhibited



The activity of worms will be increased





Photo: http://www.antikviteti.net/antikviteti-net/wp-content/uploads/2011/02/lipanovic_bioloski.pdf

Fungi, bacteria, worms and termites as causes of wood degradation Ivka Lipanović, Jurica Matijević, Dr. sc. Nada Bezić.

Larvae will increase their activity



With drastic consequences

Recipe :
 $\frac{1}{2}$ gasoline + $\frac{1}{2}$ crude oil

Doesn't help,
of course

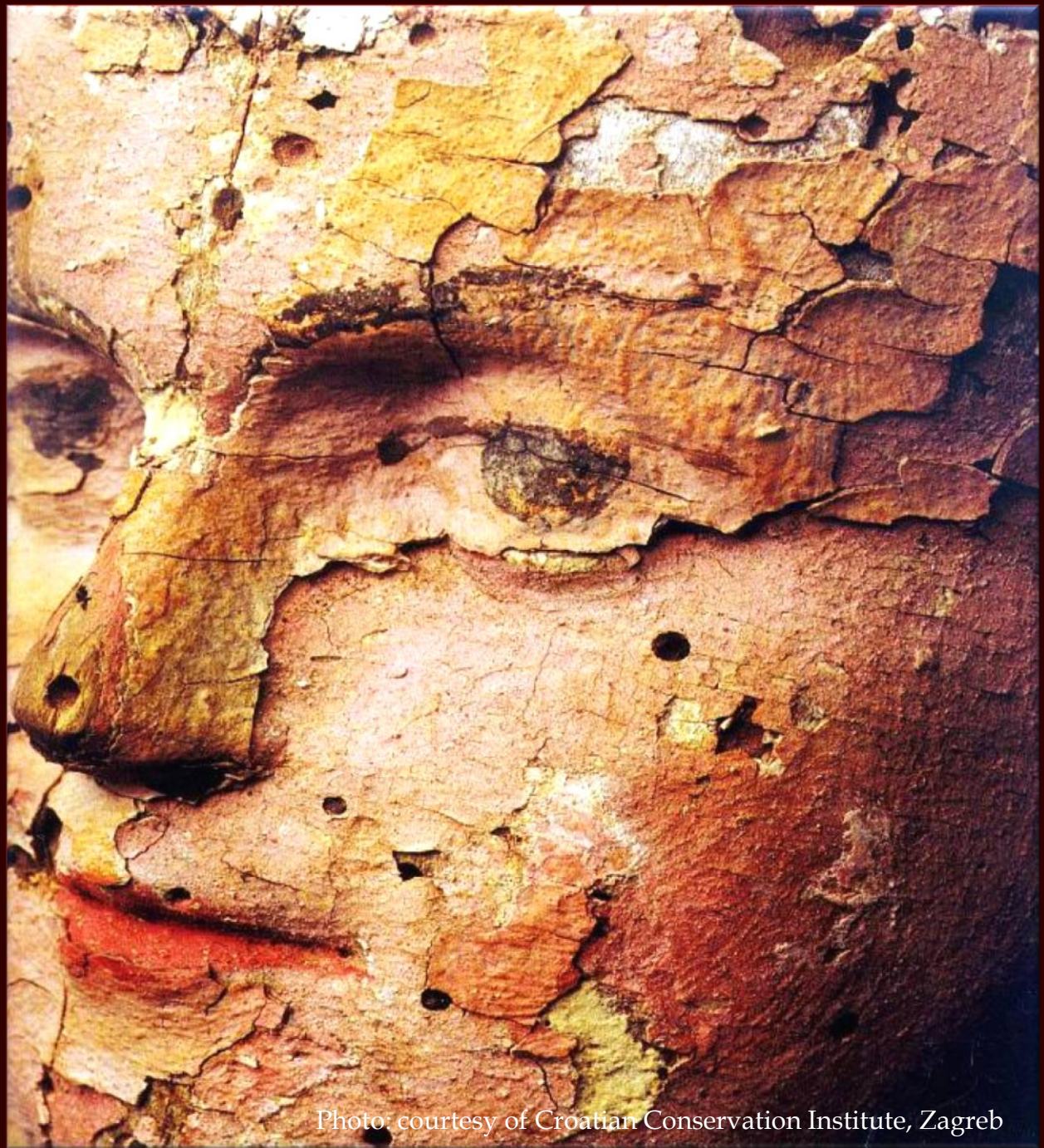


Photo: courtesy of Croatian Conservation Institute, Zagreb



Second infamous insect Clothes moth

Means against moths: lavender, tobacco, insect powder...
Many “popular” and industrial recommendations have
questionable efficacy
Camphor is poisonous

pesticides (e.g. Biokill) not recommended – for a good reason



THEY ARE ALL POISONS



The textile stored in an aluminium case since the war;
The camphor can be smelled already from the access
road to the museum, but, naturally, that did not help



If you take care of your textiles like this, moths are inevitable



You wouldn't believe it,
but, naturally, there
are positive examples

Not everything is
the same everywhere

The Academy
Cabinet of Prints



Defence against insects, moulds, fungi...



freezing

Freezing is time consuming, is not fully efficient and should be repeated

Care should be exercised with respect to solidity of objects and relative humidity

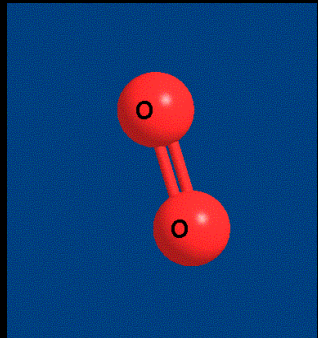
Often applied in museums – especially for textiles



heating

Most of museum objects should not be heated

Almost never applied in museums



Desinsection by removal of oxygen - anoxia

CO₂, N₂, Ar...

Time consuming, requires special skills, caution at high RH

Not applied in museums

The 3 methods - harmless to people



camphor

Efficacy not proved

4 g if swallowed = lethal dose



Often applied in museums – especially for textiles



xylamon

Efficacy below 100%



cancerogene

Often applied in museums for treating worm holes



methyl bromide



Deadly poison

Handled by authorized companies

Efficacy high but not 100%

Often applied in museums for treating worm holes



The 3 methods – very harmful to people

γ radiation

very dangerous if out of control
can be used for treating paper, wood,
textile (with caution)

advantages

completely clean process and harmless
to people
the subject of the present Seminar
100% efficacy

disadvantages requires packaging and transportation

Being available – irradiation should be used

For all programmes of museums in 2011 allocated by the Ministry of Culture of Croatia:

12,336,100 kuna = 100%

For restoration activities: 2,148,000 kuna = 16%
(the rest for exhibitions, research and similar activities)
Already an unfavourable ratio

For preventive protection: only about 342,000 kuna
Less than 3%
That is horrible

No wonder that custodies are often in a poor state and collections infected with moulds, fungi and insects

We are not alone in this trouble

The screenshot shows a Microsoft Outlook interface. On the left is the 'Mail' sidebar with folders like 'Inbox (1)', 'Deleted Items', 'Junk E-mail', etc. The main pane shows an email from Simon Lambert [sl@iccrom.org] with the subject 'Help us save endangered museum collections in storage - ICCROM Survey'. The email body contains the text: 'Museum collections are at serious risk. An estimated 60% of the world's collections in storage are inaccessible and deteriorating rapidly. You can help us. ICCROM needs your help to collect more information on this topic.' Below this, there is a list of bullet points, one of which includes a link to 'http://museumstorage.questionpro.com'. A red circle highlights the top right corner of the Outlook window, and a red rectangle highlights the subject line of the email.

Help us save endangered museum collections in storage - ICCROM Survey

Simon Lambert [sl@iccrom.org]

Follow up. Start by 6. srpnja 2011.. Due by 6. srpnja 2011..

Sent: uto 5.7.2011 18:17

To: zlaszo@mdc.hr

Museum collections are at serious risk

An estimated 60% of the world's collections in storage are inaccessible and deteriorating rapidly.

You can help us

ICCROM needs your help to collect more information on this topic.

- If you work in a museum, please complete this survey for the chance to win a one-year subscription to UNESCO World Heritage Magazine: <http://museumstorage.questionpro.com> (answers are confidential).

iccrom - re-org (<http://www.re-org.info/en>)

an estimated 60% of the world's collections in storage are inaccessible and deteriorating rapidly

Our situation is not much different

Majority of the fast biodeterioration caused by moulds, fungi, and insects...

Museums are fighting for survival
Justifiedly or unjustifiedly, preventive protection has
been put behind

Let us not forget that protection is our professional
duty



All encompassing action is urgently needed

One of them might be

Irradiation of infested ethnographic objects
That could help a lot

THANK YOU! VERY MUCH!

